MASTER PLAN FOR TESTING QWEST'S OPERATIONS SUPPORT SYSTEM IN ARIZONA

June 29, 2001

Version 4.2

Prepared For:

The Arizona Corporation Commission

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Document Control Sheet

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CGT – Draft 3.0 Changed Cover Sheet to CGT. Changed contact information. Incorporated Workshops #2 & #3 into Appendix A. Incorporated separate Appendices into one document. Replaced Appendix B content with Qwest Service Performance Indicator Definitions Version 4.3 dated January 24, 2000. Deleted content of Appendix D as it is incorporated in new Appendix B content. Distributed to TAG.	1/31/00
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CGT – Final MTP Version 4.0	3/23/00

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CGEY TMN – Version 4.1 Changed CGT to Cap Gemini Ernst & Young Telecom, Media & Networks (CGEY TMN). Changed U S WEST to Qwest. Updated contact information for Document Control. Revised Appendix A to include Emerging Services test scenarios (168-177). Replaced Appendix C to reflect current delivery status for the PMA.	2/2/01
CGEY TMN – Version 4.2 Replaced Exhibit I, "Mediated Access Architecture," in Section 3.1.1. In Section 1. Executive Overview, changed wording in bullet that describes Performance Measurment Evaluation. Updated PID Version table in Section 8.4. Revised Appendix A to include Emerging Services test scenario 178.	6/29/01

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1. Executive Overview

Qwest has filed a notice with the Arizona Corporation Commission (ACC) indicating that it will file an application with the Federal Communications Commission (FCC), pursuant to Section 271 of the Telecommunications Act of 1996 (1996 Act),to provide interLATA telecommunications services that originate in Arizona. The FCC has indicated that for Qwest to obtain 271 relief, it must demonstrate that it provides to Competitive Local Exchange Carriers (CLECs) non-discriminatory access to its Operational Support Systems (OSS) and that its systems are operationally ready and capable of handling reasonably foreseeable demand, with CLEC input. OSS are composed of various "back office" systems, databases and personnel that an incumbent LEC uses to commercially provision telecommunications service to its customers, resellers, and the purchasers of unbundled network elements. See Local Competition First Report and Order, 22 FCC paras. 516-28 (rel. August 8, 1996).

The ACC issued a Procedural Order on June 8, 1999 in Docket No. T-00000A-97-0238 which required parties to submit comments on appropriate OSS (performance) standards which could be used to assess whether Qwest meets the requirements of Section 271 pertaining to non-discriminatory access to its OSS. On the basis of responses to the June 8, 1999 Order, a second Procedural Order was issued on July 2, 1999 which initiated a series of collaborative workshops to determine the appropriate OSS performance standards for Qwest.

The ACC had previously retained Doherty and Company, Inc. (DCI) to assist Commission Staff in evaluating the access that Qwest provides to its OSS. DCI's initial scope of work included an evaluation of the functionality of Qwest's OSS. On the basis of the July 2, 1999 Order, the ACC expanded DCI's scope of work to include preparation of a Draft OSS Master Test Plan. DCI's Draft Master Test Plan was distributed to all participants in the Arizona 271 proceeding. Following the first workshop, a Request for Proposal (RFP) for conducting a comprehensive Third Party Test of Qwest's OSS was issued. Parties were allowed to comment on the proposals submitted and the ACC subsequently conducted a series of vendor interviews. Selections of a Third Party Test Administrator and a Third Party Test Transaction Generator were made in the fourth quarter of 1999.

Participant comments and suggestions concerning the Draft Master Test Plan defined the agenda for the remaining workshops. At the last workshop, the parties established a Test Advisory Group (TAG) comprised of CLECs, Qwest, and the ACC Staff to work through OSS testing issues on an ongoing basis. Through these workshops and subsequent TAG meetings, significant changes were made to the Master Test Plan, based on CLEC inputs and comments. The Master Test Plan was finalized, subject to ACC approval, by the Third Party Test Administrator, Cap

Gemini Telecom Media & Networks U.S., Inc., d/b/a Cap Gemini Ernst & Young Telecom, Media & Networks ("CGEY TMN") on March 23, 2000.

The overall purpose of the collaborative test process, to be validated by an independent third party retained by the ACC, is to demonstrate for the ACC, the FCC and the Department of Justice (DOJ) the extent of operational readiness, performance, and capability of Qwest to provide CLECs with non-discriminatory access to OSS for pre-ordering, ordering, provisioning, billing, repair and maintenance. In addition, collocation and database updates will also be evaluated. The Third Party Test Administrator's detailed test procedures and criteria, including entrance and exit standards, will be set forth in the Arizona Test Standards Document, which is currently being finalized through the collaborative TAG process. This collaborative approach will enable the CLECs to identify their specific testing needs and concerns, and provide them an opportunity to offer significant input to the test. The test includes an assessment of the functionality and capacity of Qwest's OSS. The test will be conducted primarily in a production environment in addition to normal retail and CLEC activity. The test consists of:

- **Functionality Test –** The Functionality Test (FT) is designed to provide information that the ACC can use to address the ability of Qwest's OSS to provide operational functionality to CLECs. The test will include a test of Qwest's processes including pre-ordering, ordering, provisioning, maintenance & repair (M&R), and billing. The test will focus on resale, UNE-P, UNE-Loop, UNE-Loop with number portability, and number portability. These tests involve the collection of data in a controlled manner pursuant to specified test procedures, using specified input data.
- **Retail Parity Evaluation** – The Retail Parity Evaluation (PE) test is designed to provide the ACC with information with which to directly evaluate parity of Qwest's OSS. This test is a comparison of the ability of a CLEC representative using one of Qwest's OSS interfaces to provide an overall comparable level of service and experience to the level of service and experience that a Qwest representative can provide using Qwest's standard internal OSS interfaces. The Retail Parity Evaluation test is designed to provide the ACC with information with which to directly evaluate parity of Qwest's OSS versus Qwest retail operations. This test provides for comparing OSS responsiveness as well as comparing the quality of the data accessed by the representatives. This test provides for comparing OSS responsiveness as well as comparing the quality of the data screens presented to the representative.
- **Capacity Test** – The Capacity Test (CT) is designed to provide information which the ACC can use to assess the capability of Qwest's OSS to handle loads equal to or greater than those projected by the various CLEC participants for estimated volumes projected one year from the date of the

running of the Capacity Test. These volumes will be determined by the Test Administrator using projected volumes provided by both Qwest and the CLECs. This test will include a review of procedures associated with computer systems scalability and staff scalability to determine, under stated assumptions, whether or not Qwest systems, operations and processes are predictably capable of handling CLEC loads in the future, both projected and unexpected.

- **Relationship Management Evaluation** – The Relationship Management Evaluation will provide information that the ACC can use to determine whether the methods, procedures and information which Qwest employs to communicate with the CLECs are effective. The evaluation will examine: 1) the CLEC Account Establishment Process, 2) the CLEC Account Management Processes, 3) the CLEC Training Process, 4) the Interface Development Process, and 5) the Qwest Co-provider Industry Change Management Process.
- **Performance Measurement Evaluation** – The Performance Measurement Evaluation (PM) is designed to provide the ACC with statistically valid assessments of the performance measures established to evaluate Qwest performance in providing service to the CLECs. The assessment will include reviews of Performance Measurement data collection and analysis (including an evaluation of the processes and procedures that Qwest employs to collect data and calculate performance measurements), a performance evaluation over a three-month consecutive period ~~specified by the ACC~~, Functionality and Capacity tests and Performance Measurement verification. Additionally, the assessment will determine if the reported Qwest results and data are consistent with how the performance measures are described in the Service Performance Indicator Definitions (PID) (Appendix B)

The testing evaluation will involve the following support mechanisms during testing:

- **Test Exception Process**: This is a formal process which includes retesting when an interface, system or process tested by the Pseudo-CLEC/Test Administrator does not meet established criteria, standards or expectations, in order to resolve the test exception.

- **A Test Advisory Group**: (TAG), consisting of the ACC, its consultant, the Test Administrator, the Pseudo-CLEC, Qwest and those CLECs and other participants who wish to participate will be established. Its purpose will be to act as a communications mechanism to advise all parties of test results, exceptions, and corrective action and to provide CLEC feedback on the testing.

This Master Test Plan sets forth the approach, scope and focus, timeline, roles and responsibilities, testing phases (planning, preparation, execution, and analysis/reporting), and all associated required activities for the testing of the CLEC access that Qwest provides to its OSS.

Many parties will need to cooperate regarding, and be accountable for, implementation of this test, including the Test Administrator, participating CLECs, the Pseudo-CLEC, the ACC, the ACC Staff, DCI, and Qwest. Qwest will also provide personnel to develop and execute cases on the retail side of the Retail Parity Test. The ACC Staff and the Test Administrator will oversee the execution of the testing and assess its results. CLECs and Qwest will conduct testing in a production environment as appropriate (i.e., the test participant will use systems for those interfaces that are connected to Qwest's production OSS). This Master Test Plan provides a framework for the test participants to develop more detailed test plans.

2. Introduction

2.1 Purpose

The FCC has indicated that for Qwest to obtain Section 271 authority, it must demonstrate that:

- It provides to CLECs non-discriminatory access to its OSS for pre-ordering, ordering, provisioning, repair and maintenance, and billing: For those capabilities that have a retail analog (e.g., ordering resale), Qwest must provide access in substantially the same time and manner that it provides itself.

- For those capabilities without a retail analog (e.g., ordering a loop), Qwest must provide access that allows an efficient competitor a meaningful opportunity to compete.

- Its systems are operationally ready and capable of handling reasonably foreseeable demand.

Qwest's successful execution of this comprehensive independent Third Party Test Plan will demonstrate to the ACC, the DOJ and the FCC the operational readiness, performance, and capacity of the access to OSS that Qwest provides to CLECs.

2.2 Overall Approach

To implement this test, the ACC has retained Cap Gemini Telecom Media & Networks U.S., Inc., d/b/a Cap Gemini Ernst & Young Telecom, Media & Networks ("CGEY TMN") to act as the Third Party Test Administrator to

validate results of testing the access to OSS that Qwest provides to CLECs, and provide day to day supervision of the test program. The Third Party Test Administrator will provide a final report and evaluation to the ACC.

Hewlett Packard (HP) has been retained to participate in the testing as a 'Pseudo-CLEC' or Third Party Test Transaction Generator. The Pseudo-CLEC will develop an Interconnect Mediated Access (IMA) interface to Qwest's Electronic Data Interchange (EDI) interface for use in the testing. The Pseudo-CLEC will also develop the transaction generator to execute Test Cases for both the Functionality and Capacity Tests. MCIW agreed at the second workshop, to enter repair orders through its Electronic Bonding – Trouble Administration (EB-TA) interface on the Pseudo-CLEC's behalf.

The ACC will approve the appropriate CLEC and Pseudo-CLEC involvement and participation as described herein and as developed through the workshop and TAG process. Qwest will be responsible for many aspects of this testing effort. For those test cases generated by participating CLECs, Qwest will process the pre-order, order, repair and billing transactions in a production environment. Additionally, Qwest will provide subject matter experts (SMEs) to assist in test definition, root cause analysis, and other tasks requiring in-depth knowledge of and experience with Qwest's OSS and associated methods and procedures. Section 9 further defines roles and responsibilities of all test participants.

The testing will include the functionality for pre-order/order, provisioning, maintenance and repair, and billing. Specific product types to be included are resale (with parity tests against the retail equivalents), UNE-P, UNE-L (with and without number portability), and number portability. The exact methodology which will be utilized for the Capacity Test is documented in the Test Standards Document which will be approved by the TAG prior to the start of tests, unless the parties agree otherwise or the Commission so orders. Other areas tested will include Retail Parity, Relationship Management and Performance Measurement, as set forth herein and in the Test Standards Document.

It is important for Qwest to maintain a level of 'blindness' as the tests are formulated and executed. In general, tests will be performed by CLEC and Pseudo-CLEC test participants in a live environment. The Test Administrator will maintain the greatest degree of 'blindness' as practical. The level of blindness will be governed in part by the January 25, 2000 paper entitled Arizona Corporation Commission Staff Report on the Process Issues Raised by the Competitive Local Exchange Carriers (hereinafter entitled and referred to as the "Openness Report"). See Appendix F. It is expected that issues regarding the appropriate level of blindness will continue to arise during the course of the Arizona OSS testing. Those issues will in the first instance be resolved, to the

extent possible, through consensus of the TAG. To the extent consensus cannot be reached, the ACC, after consultation with the Third Party Test Administrator and Pseudo-CLEC, will determine the appropriate degree of blindness that should be maintained.

The ACC shall retain final authority, based upon its independent review of the data and evaluative reports, to determine for regulatory purposes, and in any subsequent adjudication in which the issue is relevant, whether Qwest's OSS interfaces are in compliance with the specific standards outlined in Section 271 of the 1996 Act and the FCC's implementing rules and regulations.

2.2.1 Test Exception Process

The Test Exception Process is a formal process, which includes retesting when appropriate hereunder when an interface, system or process tested does not meet established criteria, standards or expectations, in order to resolve the test exception. The process includes the following steps:

a. An interface, system, or process tested by the Pseudo-CLEC and/or the Test Administrator does not meet objective criteria, standards or expectations.

b. The Test Administrator creates an Incident Work Order describing the issue(s) raised after certifying that the failing is factual.

c. The Incident Work Order delivered to all TAG members for review in accordance with Appendix I of the 271 Test Standards Document.

d. Qwest prepares a written response to the Incident Work Order describing any intended fix(s).

e. Qwest advises the Test Administrator that the fix is complete and retesting can be undertaken using the Performance Acceptance Certificate Form as appropriate in accordance with Appendix I of the 271 Test Standards Document.

f. The Test Administrator prepares the re-test, including, as needed, test scripts and cases for use by the Pseudo-CLEC.

g. If the re-test results meet the criteria, standards, or expectations, then the process is considered complete and the Performance

Acceptance Certificate Form is approved by the TAG in accordance with Appendix I of the 271 Test Standards Document.

h. Interested parties file comments, if required, regarding the Exception and the resolution and re-testing steps. Retesting, if determined necessary by the TAG, is to determine if the fixes by Qwest have resolved the problems causing the test case to fail. All criteria for the test must be passed at this point.

i. If the applicable criteria have not been met, the process is repeated until the criteria are met, or Qwest notifies the Test Administrator that no further work will be done to resolve the Exception.

2.2.2 Test Advisory Group

A Test Advisory Group (TAG), consisting of the ACC, its consultant, the Test Administrator, the Pseudo-CLEC, Qwest and those CLECs and other participants who desire to participate has been established. Its purpose is to act as a communications mechanism to advise all parties of test results, exceptions, and corrective action and to provide CLEC feedback on the testing. Following receipt of responses to solicitations of interest in TAG participation, the ACC established the TAG and scheduled an organizational meeting. The ACC with input from the TAG, defined TAG operating procedures, including scope of involvement, how to place items on TAG meeting agendas, distribution of information, frequency of meetings and other matters.

The TAG will generally conduct bi-monthly discussions, in person or by teleconference. As critical events occur, discussions will be in person meetings. Minutes will be kept of all such meetings or teleconferences. The TAG will attempt to resolve issues by consensus, escalating those it is unable to resolve to the ACC Staff for decisions. Further types of resolutions may include the following:

- Any TAG participant can add items to the TAG agenda or introduce issues for discussion

- Any TAG participant may have discussions with the ACC Staff regarding TAG related issues. Minutes of any TAG participant's discussions of TAG related issues with the ACC Staff may be kept and may be made available to all TAG participants as determined appropriate by the ACC Staff.

2.2.3 Master Issues Log

The Third Party Test Administrator shall maintain a Master Issues Log of all OSS testing issues submitted or presented for resolution by any member or participant of the TAG. Each issue presented shall have its own unique identification code. The Master Issues Log will also indicate the matter or category (MTP, Measures, TAG etc.) to which the issue relates, any applicable Measurement ID code, the status of the issue, a description of the issue, the originator of the issue, the date the issue was opened, the due date for action, the action owner and the date the issue is closed. All issues will be resolved by consensus of the TAG. In the event consensus cannot be reached by TAG members, the Third Party Test Administrator will escalate the issue to the ACC.

2.2.4 Additional Tests

It is recognized that unplanned troubles and other events may occur during the test period, which will indicate the need for Test Scenarios not already included in the Master Test Plan. To accommodate this eventuality the following process steps will be followed:

a. Any participant may initiate a request for a new Test Scenario during the test period.

b. The initiator documents the request in a format to be provided by the Test Administrator, and submits it to the Test Administrator, with copies to all participants.

c. The Test Administrator evaluates the request and recommends its inclusion or rejection to the TAG.

d. The TAG attempts resolution by consensus.

e. If resolved in this manner, the Test Administrator implements this resolution and notifies all participants.

f. If not resolved, the TAG escalates the request to the ACC Staff for decision.

g. The ACC Staff reaches a decision and notifies participants as in Step

h. New Scenarios introduced during the test period will be tested in a manner which will not extend the overall test timeline unless recommended by the TAG and approved by the ACC Staff.

2.2.5 Section 271 Web-site

A web-site will be established for the Arizona Section 271 test. The web-site shall be a repository for information related to the test and Qwest's Section 271 application.

2.3 Document History

The Master Test Plan is a map for how the Arizona OSS tests will be conducted. The MTP lists Test Scenario level detail and other high level requirements describing how tests will be conducted in Arizona. The 271 Test Standards document developed by the Test Administrator provides detailed Test Cases within the Scenarios, Scripts and other exact specifications as to how the Arizona tests will be conducted.

Drafts of the MTP were circulated to interested parties and reviewed in workshops and TAG meetings hosted by the ACC. See Document Milestones, page I. Before and at the workshop, the ACC solicited comments and suggestions from interested parties regarding changes to the overall testing strategy and the test plan. Changes were made through workshops and TAG Meetings.

3. Scope

3.1 System Architecture Overview

In order to provide a common understanding of the OSS to be included in the Arizona Third Party Test, brief descriptions and schematic diagrams are provided. These include: IMA and EDI architectures for preordering, ordering and provisioning, EB-TA and Interconnect Mediated Access Graphical User Interface (IMA-GUI) architecture for maintenance and repair, and CRIS and IABS architecture**s** for billing. These will be augmented by more detailed OSS and other relevant system descriptions.

3.1.1 IMA, EDI, And EB-TA Mediated Access Architecture

For the IMA, EDI and EB-TA electronic interfaces, the diagram provided on Exhibit I depicts the mediated access architecture currently provided by Qwest. As shown, the CLEC OSSs or workstations access the Qwest gateways through the security firewall. They communicate with the Qwest human-to-computer interface and/or the computer-to-computer interfaces to transmit and receive information.

See Exhibit I following.

Mediated Access Architecture

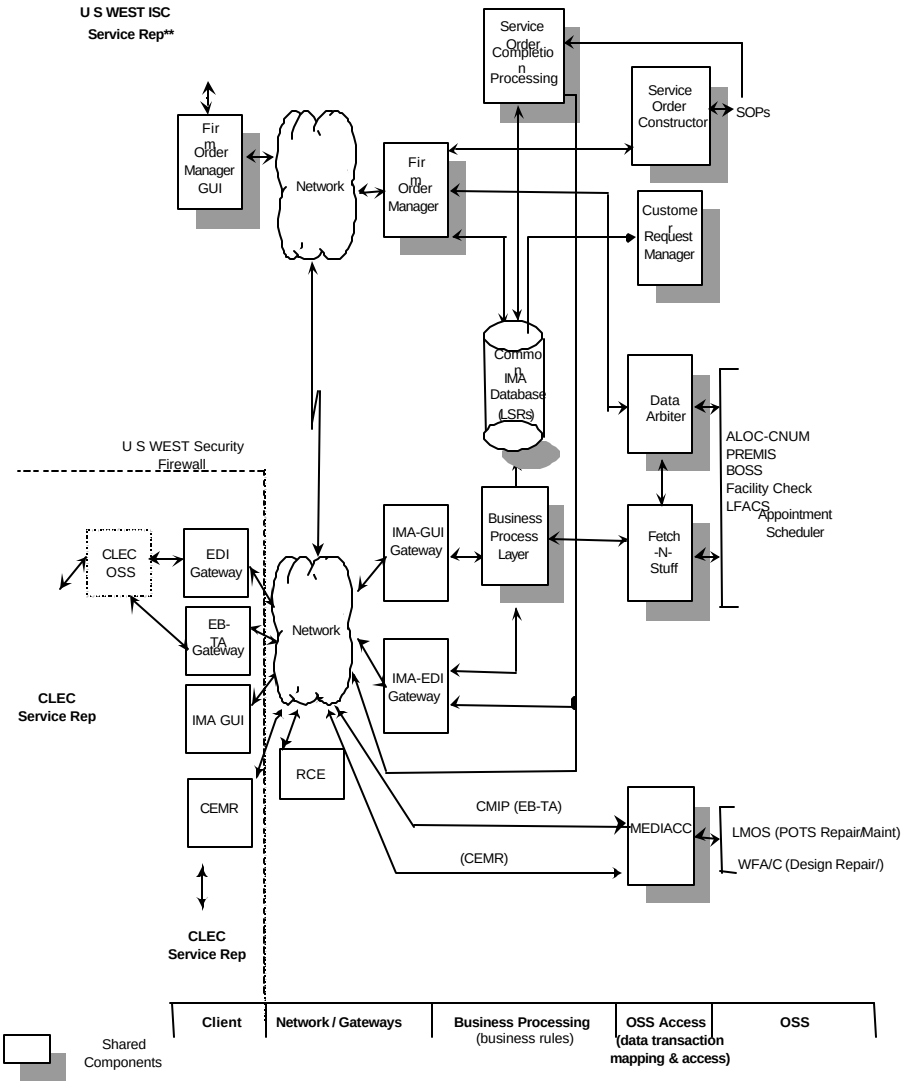


Exhibit I

Pre-Ordering and Ordering

Once the transaction is received by the Qwest gateway, a set of business rules is applied to determine how to process the request. To obtain information from Qwest's OSS or pass information to them, the OSS Access Layer (Data Arbiter, Fetch and Stuff, and MEDIACC) communicates with the downstream OSSs to send or retrieve the data. Regardless of whether a transaction is received by the Qwest gateway through the IMA GUI or EDI, it will be processed through the same set of business rules and travel through the same OSS Access Layer to reach the downstream OSSs. If the transaction is the submission of a Local Service Request (LSR), the LSR is placed in the Common IMA database regardless of whether the LSR is transmitted though the IMA or the EDI gateway. This database is updated with the status of the LSR as the Interconnect Service Center processes the LSR.

Maintenance and Repair

Likewise, if the transaction is a submission of a trouble report or any other trouble report request, the transaction is processed through MEDIACC and routed to the appropriate repair OSS.

3.1.2 Billing Architectures

CRIS Architecture

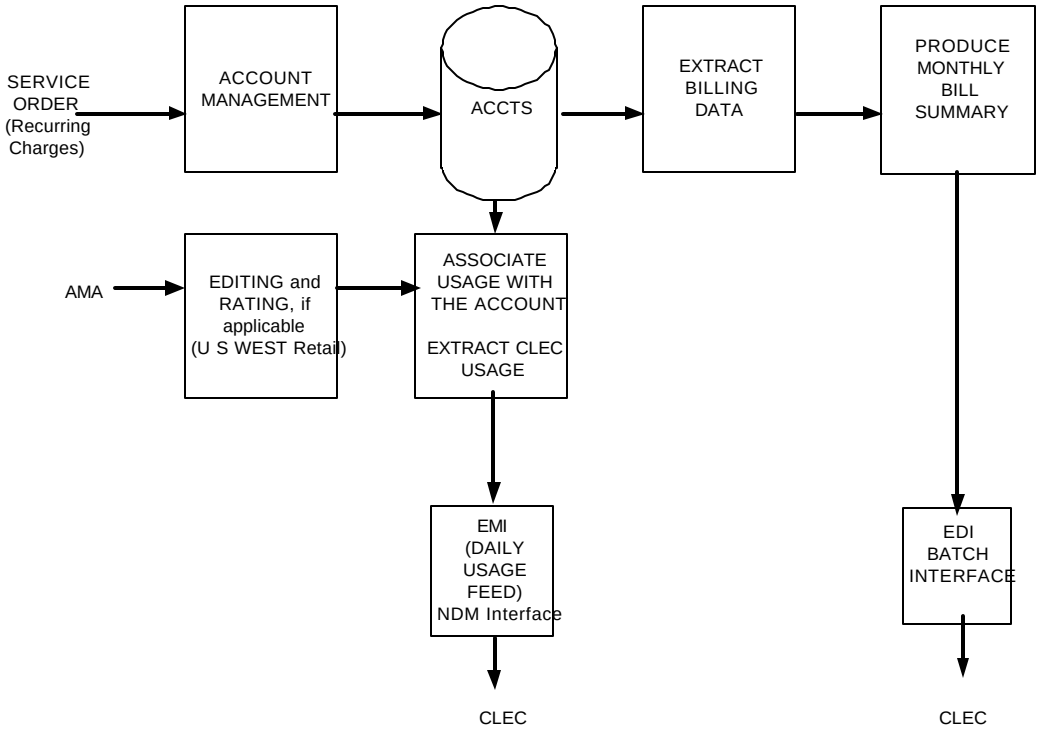
For the billing interfaces, the diagram provided on Exhibit II describes the components that produce usage and monthly bill information. When an end-user customer's account is resold to a CLEC, the resulting service order updates the account to reflect that change. As the end-user customer generates toll usage, it is sent from the AMA system into the CRIS billing system, where it is associated with the CLEC's account. The toll usage is then forwarded to the CLEC in a daily usage feed file. Qwest produces a billing summary file with all recurring and non-recurring charges and sends it to the CLEC on a monthly basis.

IABS Architecture

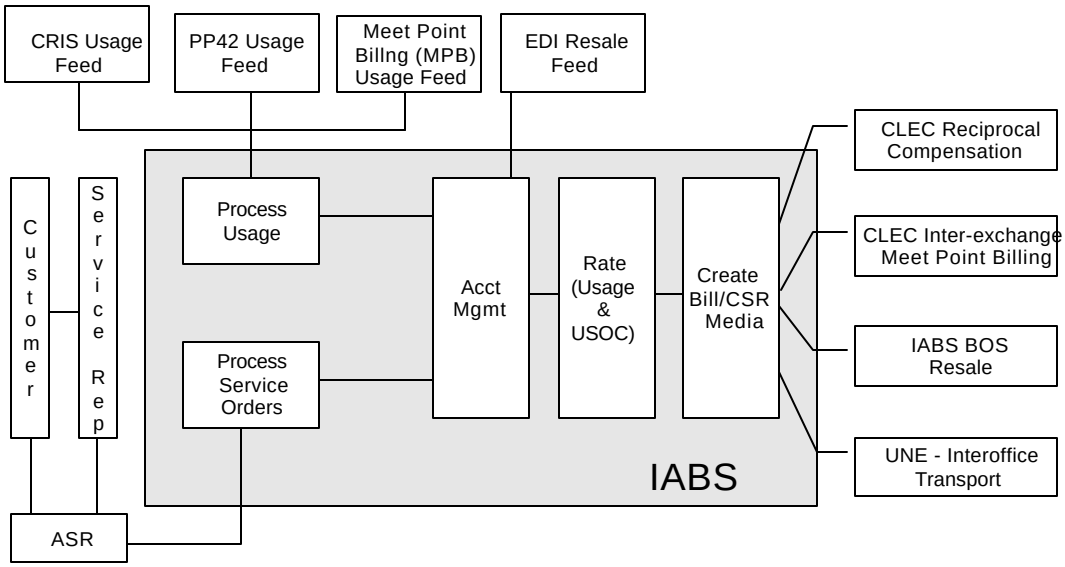
For the trunk-side unbundled network elements (UNEs) and interconnection services, the architectural diagram shown on Exhibit II is a high level description of IABS. There are three usage feeds to the usage-processing module. Another entry point is the Access Service Request (ASR) submitted by the customer service representative. These ASRs go to the service order-processing module. Both usage and service orders are sent to the account management module to associate the usage and service order detail to accounts.

Exhibit II

Billing Architecture



IABS Billing Architecture



Additionally, the EDI resale file is fed to the account management module. After usage and service order details are associated to accounts, the accounts are rated, and bills and customer service records (CSRs) are produced. Outputs for reciprocal compensation, interexchange meet point billing, resale and UNEs are then provided to the CLECs.

3.2 Assumptions

The following assumptions have been used in documenting this ACC Master Test Plan:

- Any third party support contract costs will include hardware for the pseudo-CLEC needs of the test, processing of transactions, and cost of human resources.
- Qwest will be responsible for the installation and cost of the necessary connectivity facilities (including T1s) up to the interconnection demarcation point with the Pseudo-CLEC.
- Qwest will pay for the costs of the Test Administrator and the Pseudo-CLEC.
- A Pseudo-CLEC will be established, using EDI and IMA to submit pre-order transactions, LSRs and IMA trouble transactions for most tests. For those test scenarios where the Pseudo-CLEC interfaces can't provide the coverage required, voluntary CLEC coverage will be utilized to supplement the tests being performed by the Pseudo-CLEC. These scenarios will include EB-TA and EXACT (ASR) Scenarios or others where the Pseudo-CLEC interfaces to Qwest OSS don't exist.
- The Capacity Test will be conducted using data generated via the Pseudo-CLEC, and possibly CLEC transaction simulators.
- All participants will ensure the testing does not disrupt existing customer services (e.g., 911 and other major services).
- The Capacity Test and the Functionality Test will be performed independent of each other.
- The required test volumes for Functionality, Retail Parity, and Capacity Tests will be determined and documented in the final version of the 271 Test Standards Document.
- Lines for Friendly accounts to be used for retail to CLEC conversion will be established prior to the start of the test and the initiation of transactions.

3.3 Overview of Test Types

The testing will include five types of Test Scenarios. Each of the five test types of Test Scenarios outlined below, and the following document sections (4 - 8) provide further detail for each Test Scenario type.

3.3.1 Functionality Test

The purpose of the Functionality Test is to determine the extent to which Qwest's OSS provides operational functionality to CLECs. The test determines whether the OSS adequately performs the pre-ordering, ordering, provisioning, maintenance and repair, and billing functions using a set of predefined test scenarios. Testing will utilize Qwest's production OSS and processes including manual operations.

The Functionality Test will focus on all OSS functions for resale, UNE-P, UNE-loop, UNE-loop with number portability, and number portability. Both business and residential orders will be tested, and the testing will encompass new, conversion 'as is', conversion 'as specified', partial migrations, change, disconnect, cancel, suspend, and restore activities. Test Cases developed for the Functionality Test will include end-to-end processing so that all functionality between pre-ordering and billing can be evaluated.

3.3.2 Retail Parity Evaluation

The Retail Parity Evaluation will compare the Qwest graphical user interface provided to CLECs for processing pre-order inquiries, LSRs and repair requests to the Qwest internal retail graphical user interface utilized by Qwest service order representatives. Specifically, the purpose of this test is to determine whether a CLEC representative, using a Qwest OSS interface, and provide a level of service and experience in substantially the same time and manner as the level of service and experience that a Qwest representative can provide using a Qwest standard interface.

The Evaluation will analyze the retail parity test case data with the primary purpose to determine if the Qwest OSS accessed by the CLECs collects and provides the required information in substantially the same time and manner as the information submitted and received internally by Qwest. The evaluation will also determine whether the information received by the CLEC Service Representative from the Qwest OSS is comparable in quality and completeness to the information received internally by the Qwest Service Representative. Additionally, the evaluation will determine if the data entry experience of a CLEC Service Order Entry Operator is comparable in quality and required level of

effort to that experienced by the Qwest Service Order Entry Operator. Specifically, the level of pre-order to order integration in the retail and resale interfaces will be compared.

An important element in determining whether the resale Service Representative's experience is in parity with the retail Service Representative's experience is the degree to which correctly entered CLEC LSRs flow through the Qwest OSS infrastructure in comparison to correctly entered Qwest Service Orders. Flow through as addressed in the retail parity evaluation is flow through of the LSR such that the order is accepted and presented to the backend systems. Flow through in the context of these retail parity evaluations does not include testing of how well orders are provisioned or billed. Therefore, the Test Cases for retail parity will be cancelled before provisioning occurs.

Quantitative pre-order metrics such as TN, feature validation, address validation, PIC/LPIC, due date, and facility availability query times will be measured and reported for all pre-order Test Cases and for the pre-order portions of all order Test Cases (for the Retail Parity Test). These metrics will be collected as detailed Test Cases and Scripts are executed by Qwest Service Representatives for retail and Pseudo-CLEC Service Representatives for resale.

3.3.3 Capacity Test

The Capacity Test will validate that Qwest's OSS Systems and processes can handle loads equal to or greater than those projected by the various CLEC participants for estimated volumes projected one year from the date of the running of the Capacity Test. Additionally, Capacity Testing includes a review of procedures associated with computer system scalability and staff scalability, to determine, under stated assumptions, whether or not Qwest appears capable of handling both projected and unexpected CLEC future demand. Qwest's ability to handle unexpected CLEC future demand will be evaluated as part of these scalability evaluations. The Capacity Test differs from the Functionality Test, in that it is constructed of a repeatable, controlled, usually simulated test load, focused on volumes rather than on functionality. Consequently, a restricted subset of functionality will be used as the input workload to drive the systems, and large volumes of pre-order and order transactions will be evaluated, based on forecasts one year from the running of the Capacity Tests.

3.3.4 Relationship Management Test

This test is a 'process test' to ensure that Qwest's system and/or process change control methods are appropriately handled and effectively communicated to CLECs, based on the defined change control procedures. This test focuses on the procedures Qwest uses to interact with CLECs.

To best demonstrate this ability, a new release of software may be introduced during the test period. During the new release, Qwest's ability to successfully notify and support affected CLECs will be evaluated.

In addition, Qwest's overall interaction with CLECs concerning OSS will be evaluated. This includes Qwest's programs for providing systems information, system training, and system problem identification and resolution.

3.3.5 Performance Measurement Evaluation

The Performance Measurement Evaluation is an assessment of the performance measures processes established to evaluate Qwest performance in providing service to the CLECs and to its retail customers.

The purpose of the Performance Measurement Evaluation is to verify that Qwest is properly collecting and using data when computing the results of performance measures. The evaluation will consist of the following:

- Reviewing processes in place for collecting data
- Computing results of performance measures and evaluating performance measure data for the three most current consecutive months to determine if Qwest is properly computing results
- Verifying Functionality and Capacity Test Performance Measurement

3.4 Product Types/Order Types

The testing will cover the various order types associated with the three modes of CLEC entry: resale, unbundled network elements, and number portability. Testing will include both residence and business orders and will encompass new, conversion "as is", conversion "as specified", partial migrations, change, supplementals, disconnect, cancel, suspend, and restore order types, as relevant to the specific product scenario being tested.

Qwest's OSS will generate acknowledgments (EDI 997), error rejections, Firm Order Confirmations (FOCs), Service Order Completions (SOCs) and jeopardy

notifications to the CLECs, consistent with Qwest's documented business rules and specifications.

Electronic gateways considered within the scope of this testing are IMA and EDI for pre-order and order, EB-TA and IMA for maintenance and repair and, EMI and EDI for billing. These electronic gateways are the means in which CLECs access Qwest's OSS systems.

The following product types will be processed via the electronic gateways:

- Resale – At a high level, the Test Scenarios to be included in the resale test are as follows:
    - Retail to Resale Conversion – Qwest customer converts to CLEC
    - Resale – New connect of a CLEC customer
    - Resale – Change features of an existing CLEC customer
    - Resale – Disconnect a CLEC customer
    - Suspend and Restore - CLEC initiates a request to suspend a customer's service and may later initiate a request to restore service.
- Unbundled Network Elements –At a high level, the Test Scenarios to be included in this test for UNE-P and UNE-L orders are:
    - Retail to UNE-P Conversion - Qwest customer converts to CLEC
    - Retail to UNE-L - Qwest customer converts to CLEC, where unbundled loop is leased from Qwest by CLEC
    - Retail to UNE-L with Number Portability - Qwest customer converts to CLEC, where unbundled loop with number portability is leased from Qwest by CLEC
    - UNE-L New - End user establishes new service (i.e., UNE-L) with CLEC
    - Retail to Local Number Portability - Qwest customer converts to a CLEC keeping the same TN but using only CLEC facilities; the customer takes a Qwest number when they move to a CLEC

- UNE-P Change - Request to change a feature
- UNE-P Disconnect – Service is disconnected from the end-user
- UNE-L Disconnect – Service is disconnected from the end-user
- UNE-P to UNE-L

The following sections will further detail how these order types and product types will be tested.

4. Functionality Test

4.1 Functionality Test Purpose

The purpose of the Functionality Test (FT) is to provide information that the ACC can use to assess the ability of Qwest systems to provide the requisite functionality to CLECs. These functions include:

- Pre-ordering
- Ordering
- Provisioning
- Maintenance & Repair (M&R)
- Billing
- Special functions, such as 911 and DA

The first principal objective of the FT is to verify the ability of the Pseudo-CLEC to submit LSRs to the Qwest OSS and have Qwest successfully install the requested service or facilities in a timely fashion. This includes the ability to track the progress of the LSRs through those systems, install the service or facility and to observe final order completion, verify the establishment of billing records, and verify the accuracy of those records against known usage. In some cases, ASR test scenarios (entered into the Qwest EXACT System) may need to be executed by volunteer CLECs. The integration quality of pre-order and order data will also be evaluated during the functionality tests. Additionally, comparisons of these functions in the retail and resale environments will be done as part of the Retail Parity Evaluation.

The second principal objective of the FT is to validate the ability of a CLEC participant to access M&R systems using EB-TA. Additionally, the Pseudo-CLEC will access M&R systems using the Qwest IMA GUI. Relevant aspects of these accesses include the ability to:

- Determine whether these systems will generate a timely and correct trouble report
- Determine whether Qwest will notify the CLEC or the Pseudo-CLEC of successful restoration of service after the service fault was identified and corrected.
- Determine if a participant CLEC or Pseudo-CLEC can initiate an Mechanized Loop Test (MLT) test for a reported trouble

Scenarios verifying the MLT will be included in Test Cases for the Functionality Tests. The FT is also intended to address certain special subjects, including the 911/E911 and Directory Assistance databases.

4.2 Functionality Test Scope

The Functionality Test will include a defined number of inputs and a specific set of scenarios. Scenarios are specific types of orders and products to be included in the 271 tests. The definition of Scenarios is primarily the responsibility of the CLECs and Qwest with final additions possibly suggested by the Test Administrator.

Test Cases are different order types or product instances within a Scenario. Additionally, Test Case definitions include information on the inputs, purpose, expected results, measures, and failure criteria for the Test Case. The development of Test Cases is the responsibility of the Test Administrator.

Test Scripts are detailed step by step instructions for each Test Case. The development of Test Scripts are the responsibility of the Test Administrator.

Iterations are additional instances of Test Scripts of a specific Test Case with minor data changes to increase the samples within a statistical cell to achieve the required sample size. The development of additional iterations to achieve a required sample size is the responsibility of the Test Administrator.

The Test Cases will include appropriate Test Case instances and iterations covering the order types and product types detailed in Section 3 and in Appendix A[1]. The set of Scenarios will be enhanced with CLEC input through workshop and TAG participation.

The Test Administrator will analyze these Scenarios, develop Test Cases, and determine the proper mix of orders and the number of iterations required for loading and for statistical validity.

These Test Cases will be submitted to Qwest via prescribed electronic methods, as proposed below.

4.2.1 Pre-Order/Order/Provisioning Processes

Pre-ordering is the process that allows CLECs the ability to query Qwest's databases to verify or obtain certain information necessary to

[1] Appendix A is a detailed listing of the test scenarios for the Functionality Test and the Retail Parity Evaluation. Scenarios 1 to 126 are the scenarios for the Functionality Test, and scenarios 127 to 165 are the scenarios for the Retail Parity Test. The chart lists each scenario by order type, and it also includes columns indicating the details of the scenario (e.g. the features involved, listing information), and explanation of the directory listings for the scenario, and an indication of whether or not a maintenance and repair test will be included in the scenario.

issue a valid LSR. Ordering is the process that CLECs use to format and issue LSRs to Qwest. Provisioning consists of the processes that Qwest uses to install the service or facility ordered. The pre-order, order, and provisioning Functionality Test will involve the following interfaces:

EDI: Utilizing a Pseudo-CLEC to test the EDI preorder/order interface; and

IMA GUI: Using a combination of Pseudo-CLEC data and CLEC-supplied data for the IMA GUI pre-order/order test.

4.2.2 Maintenance and Repair Interfaces

Maintenance and Repair (M&R) is the function used by CLECs to report end user and network troubles to Qwest, test the end user lines by MLT, sectionalize the trouble conditions, and check the status of the reported troubles. Any trouble, planned or unplanned that occurs during the test process will be considered part of the tests. The process to be utilized for the retests is defined in section 2.2.1.

The Maintenance and Repair Functionality Test will involve the following interfaces:

EB-TA: Collaboration with one or more CLECs to test the existing EB-TA interface for maintenance and repair test transactions.

IMA GUI: Using Pseudo-CLEC data for maintenance and repair test transactions.

4.2.3 Billing Interfaces

Billing is the ability of Qwest to provide CLECs with accurate wholesale bills and usage data, as well as records, for the services, features, network elements (e.g., loop,) and features that were ordered and provisioned. The primary focus for testing the billing interfaces is to validate the timeliness, accuracy, and completeness of the Qwest billing processes.

The Billing Functional Test will involve the following interfaces:

EMI: (Exchange Message Interface) – This is an ATIS standard format of messages used for the interchange of telecommunications message information among telephone companies. Telephone companies use EMI to charge billable, non-billable, sample, settlement, and study data.

EDI: (Electronic Data Interchange) –This standard allows for the transmission of billing data between trading partners. EDI software translates fixed field or "flat" files that are extracted from applications into a standard format and hands off the translated data to communications software for transmission.

4.3 Functionality Test Coverage and Scenarios

Functionality Test coverage has been established to ensure that the functionality being tested best reflects the current and anticipated business environment. The development of the Scenario coverage is designed to ensure that each Scenario provides value-added processing, and duplication of common processes is minimized. In order to gain a reliable statistical sample of processing measures, several iterations of similar tests may be necessary. The Test Administrator will analyze these ordering Scenarios to determine the proper mix of orders and the number of iterations required for loading and statistical validity.

The Functionality Test will include flow-through service orders and manual processes used to process orders. Flow-through orders are electronically received LSRs that have service orders accepted by the Service Order Processor without intervention.

Section 1 of Appendix A details the proposed Test Scenarios for the Functionality Test. These Scenarios will be used to create the detailed Test Cases and subsequent orders/LSR/ASR. At a high level, the Scenarios consist of pre-ordering, ordering, provisioning, and billing. A subset of the Scenarios will also include maintenance and repair activities. The following provides an overview of the test Scenarios based on the processes to be tested.

4.3.1 Pre-Ordering/Ordering

The pre-order process of the Functionality Test will include the following:

- Address Validation
- Customer Service Record (CSR) Inquiry
- Service and Feature Availability
- Telephone Number Reservation
- Due date assignment (includes order for which dispatch is or is not required)
- Facility Availability
- Loop Qualification
- Reject/failed inquiries

4.3.2 Ordering/Provisioning

Functionality included in the provisioning process of the Functionality Tests include the following:

- Receipt and Acknowledgement of LSRs
- Reject Processing
- Manual or Mechanized Service Order Creation
- Receipt of the FOC (Firm Order Confirmation)
- Service Order Status Query
- Processing through the SOPs (Service Order Processors)
- Completion of the LSRs (Installation of the ordered service or facility)
- Receipt of the notification for Service Order Completion (SOC)
- 911 and DA database updates

The Functionality Test will also cover the ability of the Qwest OSS to receive the following order activities as *inbound* transactions:

- New Account Establishment
- Conversion (retail to resale or UNE-P)
  Change
- Suspend/Restore
- Disconnect
- Supplemental Orders
- Cancellation Orders

The Functionality Test will test the ability of Qwest's OSS to send the following *outbound* transactions:

- Order Rejection/Error Notification
- Order Acknowledgement
- Firm Order Confirmation
- Jeopardy Notice (or equivalent)
- Service Order Completion Report
- Update 911 and DA databases
- Loss notification

4.3.3 Back-End Processing

Back-end processing is the ability to establish services and features as requested in LSRs. The Back-End Functionality Test will test the ability of Qwest's back-end systems to provide CLECs with the services and features being requested, and to update databases, including 911 and DA. The Service Order Completion notification to the CLEC indicates that provisioning is complete.

4.3.4 Billing

Billing is the ability for Qwest to provide accurate, timely, and complete usage data and billing records to CLECs for the services, features, network items, and functions that were ordered and provisioned. In addition, verification of the documented charges must occur for recurring, non-recurring, usage-sensitive charges, and miscellaneous charges. The primary focus of the Billing Functionality Test is to validate the ability of the billing systems to receive the input in a timely manner and to process the bills accurately. Elements of this test include the following:

- Verify that what is ordered is what is billed
- Verify that the bills provide for accurate recurring, non-recurring, and usage-sensitive charges
- Verify that rates are applied correctly for each product, service, or element
- Verify that taxes and surcharges have been assessed correctly
- Verify that discounts and adjustments are performed correctly
- Verify that prorated amounts are charged accurately according to the disconnect date
- Verify that disconnects are processed and appear accurately on the bill
- Verify that daily usage files are updated accurately. Data contained in Daily Usage Feeds will be compared to call logs and Telco Bills.

If discrepancies are determined, they will be handled utilizing the Incident Work Order Process defined in Appendix I of the 271 Test Standards Document.

4.3.5 Maintenance and Repair

Maintenance and Repair (M&R) provides the ability for CLECs to report trouble to Qwest and to check the status of trouble tickets. A select set of the Functionality Test Scenarios will contain planned M&R activities and will be developed considering the highest volume types of troubles. The focus of the Maintenance and Repair Functionality Test will be on the evaluation of the electronic trouble request submission (trouble report) process, status (trouble handling), and repair (closing of the ticket). Test Scenarios will include the following:

- No Dial Tone
- Static/Noise on the Line
- Cannot Call Out

- Cannot Be Called
- Cannot Call Long Distance
- Features Not Working

4.4 Functionality Test Volumes

The appropriate test volume will be set to ensure that all tests are conducted with enough data to allow statistical soundness when evaluating the processes and outputs. The number of accounts, transactions, and test iterations will be determined by the Test Administrator to ensure that the test volume is adequate.

4.5 Functionality Test Data

The input data LSRs and ASRs required for the Functionality Test are data originating from CLECs and the Pseudo-CLEC (resale, UNE-P, UDIT, and UNE-L test cases and retail to resale conversion test cases). The proposed method for establishing and processing these data is through the use of Friendly accounts, known henceforth as Friendlies, and test accounts. Enough accounts must be established to ensure statistical soundness.

Since a production environment approach is being used, the Friendlies accounts will reflect real customers and facilities, and will consist of Qwest, CLEC, and ACC employees. A CLEC's own account may also be used.

The management of Friendlies is an important aspect of this test. An additional line(s) for the residential Friendlies will be provisioned to each of the homes to ensure that the existing service is not disrupted. Once the testing has been completed, these lines will be disconnected. The processes and associated high-level tasks required to manage the Friendlies are as follows:

- Determine number of Friendlies required based on total number of scenarios, conditions to be validated, and statistical validity
- Determine distribution and location of Friendlies
- Identify Friendlies and associated locations
- Map Friendlies/locations to test scenarios/call scenarios
- Provide for environmental needs for Friendlies (additional line installation)
- Determine the process for managing the Friendlies and notifying them of their testing responsibilities

4.6 Functionality Test Participants

A successful Functionality Test requires participation, commitment, and accountability from the following:

- **Pseudo-CLEC** – The third party retained to create and run the test transaction generator will act as a Pseudo-CLEC and have the same responsibilities as the CLECs below during the testing phases. The Pseudo-CLEC will be additionally responsible for customizing its transaction generation software to function with Qwest's OSS before testing begins.

- **Test Administrator –** The role of the selected Test Administrator is to monitor/oversee the testing effort, act as test supervisor in the day-to-day operations of the project, track issues that arise during the test, determine Root-Cause Analyses of Issues with participating CLEC, Pseudo-CLEC and Qwest input, analyze the outcome of the test effort, and provide a feedback report to the ACC. Specifically, the Test Administrator will be responsible for the generation of the actual test cases and the coordination of other parties involved in the testing.

- **Test Friendlies** – The Friendlies will be actual volunteers. They will receive packets of information detailing the types of transactions (calls) they will be required to originate, the dates required, and any documentation they are required to create to document their test calls.

- **Qwest** - Qwest will act in a supporting role as directed by the ACC and its DCI representatives. This role includes providing subject matter experts (SMEs) for consulting and support during test planning, preparation, execution, and analysis. Qwest's systems, operations, and processes are the basis for the test.

- **CLECs** – CLECs selected by the ACC to participate in the testing effort will be required to provide input to test cases and Friendlies accounts based on the scenarios defined in Appendix B. Additionally, they will be responsible for conducting the tests and reporting the outputs based on the direction from the ACC and the Test Administrator.

A complete list of roles and responsibilities for the entire testing effort is detailed in Section 9.

4.7 Functionality Test Phases

The purpose of this section is to detail the types of activities required in each of the Functionality Test phases: Test Planning, Test Preparation, Test Execution, and Test Analysis and Reporting. These activities will be tracked in an overall project plan to be created and maintained by the Test Administrator.

4.7.1 Test Planning

This section details the activities, entrance criteria, and exit criteria necessary for the Functionality Test Planning Phase.

4.7.1.1 Test Planning Activities

- Baseline the ACC Master Test Plan and providing revisions as necessary
- Define scope and objectives
- Develop Test Milestones
- Define test management items (jeopardy management, issue management, etc.)
- Define test participants roles and responsibilities
- Define the Test Scenarios
- Establish the data approach
- Establish the appropriate testing volumes
- Determine the appropriate resources to support the test preparation and execution phases

4.7.1.2 Test Planning Entrance Criteria

The following are the entrance criteria to the Functional Planning Phase, as there must be a firm understanding of the technical basis and objectives of the test before the remaining planning can be completed.

- Identify test volumes, such as the exact number of Friendlies and test accounts and the total number of activities initiated by the Friendlies within the testing timeframe
- Identify test iterations to establish the appropriate number of tests and volumes to ensure statistical soundness
- Identify test execution interval (number of days) to cover multiple billing periods and other constraints such as installation intervals
- Identify test participants and the associated roles of each
- Manage test ‘blindness’
- Identify the Friendlies mix and locations
- Define the overall testing environment
- The statistical methodology has been established

4.7.1.3 Test Planning Exit Criteria

The Test Planning Phase exit criteria consist of assurances that the work in subsequent phases is understood by all participants.

Written planning outputs will be supplied to the Test Administrator and reviewed in planning sessions. The exit criteria consist of establishment of the following:

- Baselined test plan for each participant
- Test Milestones defined
- Defined schedule, including critical path items

4.7.2 Test Preparation

This section details the activities, entrance criteria, and exit criteria necessary for the Functionality Test Preparation Phase.

4.7.2.1 Test Preparation Phase Activities (by Test Administrator)

- Develop detailed test monitoring plans
- Develop detailed project plans
- Define OSS environment requirements
- Finalize the Test Scenarios and analyze the test coverage
- Identify and assigning the Friendlies
- Create the Friendlies test packages

4.7.2.2 Test Preparation Entrance Criteria

- All participant input to the test plans have been received and documented.
- All participant input to the test specifications have been acquired and documented.
- Determine available Friendlies

4.7.2.3 Test Preparation Exit Criteria

Activities in the test plans necessary for the start of test execution must be complete. This phase requires Test Script review by the Test Administrator.

4.7.3 Test Execution

This section details the activities, entrance criteria, and exit criteria necessary for the Functionality Test Execution Phase.

4.7.3.1 Test Execution Phase Activities

Test execution includes the following key activities:

CLEC participants, Pseudo-CLEC, and Qwest

- Execute the Test Cases according to the individual test plans
- Document test results, issues, resolution, and status

Test Administrator

- Position staff at Pseudo-CLEC and CLEC facilities to observe the input and processing of transactions
- Conduct surveillance of Pseudo-CLEC interaction with Qwest in the resolution of issues
- Review weekly status summaries on the current state of each test scenario
- Review data submitted by test participants
- Determine whether the Pseudo-CLEC defined timeline of LSR submission was followed
- Reports problems uncovered in the test, tracks problem resolutions and retests for resolution with the consensus of the TAG – per Section 2.2.1 "Test Exception Process"

4.7.3.2 Test Execution Entrance Criteria

- Baselined test plans for each participant
- Test Scripts for testing for each participant
- Friendlies preparation
- Operationally ready and available interfaces and systems required for the testing
- Executed system and access agreements, including assignment of required sign-on accounts and passwords
- Appropriate SME staff
- Sufficient establishment of the Arizona Performance Measures
- The Test Administrator has sufficiently completed its evaluation of the Qwest processes for data collection and calculation of the Arizona Performance Measures

4.7.3.3 Test Execution Exit Criteria

A review session is required to complete this phase.

- All test specifications executed and classified as pass/fail according to the plan
- No outstanding major problems, as determined and concurred by the TA and the ACC
- 1 or 2 billing cycles verified, and a sufficient number of disconnects verified.

4.7.4 Test Analysis and Reporting

This section details the activities, entrance criteria, and exit criteria necessary for the Functionality Test Analysis and Reporting Phase.

4.7.4.1 Test Analysis and Reporting Phase Activities (by Test Administrator)

- Examine the data submitted by the Pseudo-CLEC for accuracy and completeness
- Analyze the complete transactional processing for each order
- Track issues that arose during the test
- Perform Root-Cause Analyses of all Issues and follow the Test Exception process in section 2.2.1
- Recommend technical solutions to obstacles encountered during the test
- Prepare a report for the ACC

4.7.4.2 Test Analysis and Reporting Entrance Criteria

This phase requires all outcomes documented during the test execution phase.

4.7.4.3 Test Analysis and Reporting Exit Criteria

A review session is mandatory to complete this phase. Required documents at this review session are the participants' results, which will be combined into a single report document and presented to the ACC. The Test Administrator will also complete a report for the ACC to be submitted along with the participants' results.

4.8 Functionality Test Success Criteria

Measurable Standards (Benchmarks and Parity Measures) for Performance Measures listed in Appendix B, as modified with CLEC and Qwest input during the Workshops, and as approved by the ACC, will serve as criteria for success of Functionality Testing.

The Functionality Test success criteria will indicate that all processing is stable (i.e., no major service interrupting or semi-major service impacting issues, and few minor problems). Test results can include a small number of Qwest software and method problems. Based on the analysis of any such problem, the failure may be sufficiently serious to abort the test and restart once the failure has been fixed. If the scope of the failure is small and the problem is not

serious, the test may continue, or Qwest may opt to provide a fix. Qwest must identify any failures that it discovers, along with a complete explanation, to the Test Administrator for distribution. The decision on whether or not to proceed with the test will be made by the Test Administrator with approval from the ACC.

4.9 Functionality Test Assumptions

- Wherever possible, activities and tests will be streamlined and conducted in parallel.
- CLECs will provide input to the test scenarios, test specifications and cases.
- Preparation of the environmental needs for Friendlies will not require significant infrastructure changes.
- The test participants can run their tests independently.
- Two bill cycles are planned, and a bill cycle is 30 days.

5. Retail Parity Evaluation

5.1 Retail Parity Evaluation Purpose

The Retail Parity Evaluation is a type of functionality test that evaluates whether a CLEC representative, using a Qwest intended OSS interface, is able to provide a level of service and experience to customers in substantially the same time and manner as the level of service and experience that a Qwest representative can provide using the equivalent internal Qwest OSS interface. The primary goal of the Retail Parity Evaluation is to compare the CLEC's ability to process pre-order inquiries, LSRs and repair requests (utilizing the OSS Interfaces), to the Qwest retail equivalent utilization of the systems. Specifically, the purpose of this test is to determine whether a CLEC representative, using a Qwest OSS interface, can provide service in substantially the same time and manner as the service that a Qwest representative provides.

5.2 Retail Parity Evaluation Scope

A specific set of Test Scenarios which have Retail comparisons are to be used for the Retail Parity Evaluation. These tests cover pre-ordering, ordering, and maintenance and repair scenarios as defined in Section 3. In general, each CLEC Test Scenario has a corresponding Qwest retail scenario in order to conduct a comparison of functionality.

The Retail Parity Evaluation is both a quantitative and qualitative test. It is quantitative in that it evaluates, to the extent possible and appropriate, OSS response times on a comparative basis, recognizing a difference in processes. It

is qualitative in that it compares the information that a Qwest representative handling a customer can obtain compared to that which a CLEC representative can obtain, in terms of equivalency and accuracy. This includes not only standard pre-order and ordering functionality, but also other information needed to handle customers, such as: order status, escalations, and obtaining preferential or vanity numbers.

The focus of the Retail Parity Evaluation is on the experience which the customer has while on the line with a CLEC representative, in comparison to the experience of a customer while on the line with a Qwest representative. Because of this, once the order has been submitted, it is only necessary to run the Retail Parity Evaluation through the ordering processes or through submission of a trouble report. Consequently, the Retail Parity Evaluation activities will be cancelled in the Service Order Processor (SOP).

The Retail Parity Evaluation will involve test comparisons between the IMA GUI and the retail systems utilized by Qwest's Service Order Representatives.

5.3 Retail Parity Evaluation Coverage and Scenarios

Section 2 of Appendix A details the proposed Test Scenarios for the Retail Parity Evaluation. These scenarios will be used to create the detailed Test Cases and subsequent orders/LSRs. At a high level, the scenarios cover pre-ordering and ordering processing. The following provides a high-level overview of the Retail Parity Evaluation scenarios:

- Resale New Connect compared to Retail New Connect
- Retail to Resale Conversion compared to Retail 'Win Back'
- Resale Change compared to Retail Change
- Resale Suspend and Restore compared to Retail Suspend and Restore
- Various Resale Maintenance and Repair Activities (Reporting, Start using, MLT) compared to the equivalent Retail Activities

5.4 Retail Parity Evaluation Volumes

The appropriate test volume will be established to ensure that the comparison process provides a reliable statistical sample of performance measurements when evaluating the processes and outputs. It is anticipated that the volume required for this effort will be a subset of the volumes required for the overall Functionality Test detailed in Section 4. However, the number of accounts, transactions, and test iterations must still be determined to ensure that the test volume is adequate. The Test Administrator will determine these volumes.

5.5 Retail Parity Evaluation Data

The goal of the Retail Parity Evaluation is to evaluate resale transactions against the equivalent retail transactions. Consequently, this effort should use test accounts, or Friendlies, where the basic account set-up and locations can be as similar as possible to provide the most accurate comparison. For example, to test that scheduling appointments for the dispatch of an installation technician occurs equally for retail and resale customers, it is most desirable to have these accounts serviced out of the same wire center, and as geographically close to one another as possible.

Data must originate from both resale CLECs and from Qwest retail. Enough accounts must be established and tested to support the right sample amount to ensure statistical soundness. Like the Functionality Test, the Retail Parity Evaluation will be conducted in a production environment, and Qwest active participants (e.g., customer service reps) will maintain the required level of 'blindness' by not knowing which accounts are in production as test accounts.

5.6 Retail Parity Evaluation Participants

The participants required for conducting a successful Retail Parity Evaluation are the same as those detailed in the Functionality Test, Section 4.6. Qwest will have an additional role to execute test cases, since pre-order, order, and M&R activities must be established for retail customers.

5.7 Retail Parity Evaluation Phases

Although the phases and required activities for the Retail Parity Evaluation are similar to those defined in Section 4.7 for the Functionality Test, a number of other phases and activities are necessary.

5.7.1 Test Planning

This section details the activities, entrance criteria, and exit criteria necessary for the Retail Parity Test Planning Phase.

5.7.1.1 Test Planning Activities

- Define scope and objectives
- Define test management items (jeopardy management, issue management, etc.)
- Define test participants roles and responsibilities
- Define the Test Scenarios
- Develop the comparison approach for pre-order, order and maintenance scenarios
- Develop the Test Cases

- Develop the Test Scripts
- Establish the data approach
- Establish the appropriate testing volumes
- Determine the appropriate resources to support the test preparation and execution phases

5.7.1.2 Test Planning Entrance Criteria

- Identify test volumes, such as the exact number of Friendlies and test accounts and the total number of activities initiated by the Friendlies within the testing timeframe
- Identify test iterations to establish the appropriate number of tests and volumes to ensure statistical soundness
- Identify test execution interval (number of days) to cover multiple billing periods and other constraints such as installation intervals
- Identify test participants and the associated roles of each
- Identify the Friendlies mix and locations
- Define the overall testing environment
- The statistical methodology has been established

5.7.1.3 Test Planning Exit Criteria

- Baselined test plan for each participant
- Baselined Test Scripts are complete
- Test specifications from the Pseudo-CLEC participants
- Defined schedule, including critical path items

5.7.2 Test Preparation

This section documents the activities, entrance criteria, and exit criteria required for the Retail Parity test preparation phase.

5.7.2.1 Test Preparation Phase Activities

- Develop detailed test monitoring plans
- Develop detailed project plans
- Define OSS environment requirements
- Finalize the Test Scenarios and analyze the test coverage
- Finalize the Test Scripts
- Establish segregated operating terminals at Qwest
- Identify and assigning the Friendlies
- Create the Friendlies test packages

5.7.2.2 Test Preparation Entrance Criteria

- Test Standards written, reviewed and commented on by TAG
- Scope of the tests finalized and approved by the TAG
- Determine available Friendlies

5.7.2.3 Test Preparation Exit Criteria

- Test plan activities section complete
- Test Scripts reviewed by Test Administrator

5.7.3 Test Execution

This section documents the activities, entrance criteria, and exit criteria required for the Retail Parity test execution phase.

5.7.3.1 Test Execution Activities

Pseudo-CLEC and Qwest

- Execute the Test Cases according to the scripted Test Cases per the instructions of the monitoring Test Administrator representative.
- Document test results, issues, resolution, and status

Test Administrator

- Position staff at Pseudo-CLEC and Qwest facilities to observe the input and processing of orders
- Closely guide the execution of the Retail Parity Evaluation Test Scripts in both the Pseudo-CLEC and Qwest facilities carefully counting and measuring the planned data and documenting the results on the Test Scripts.
- Review recorded problems uncovered in the test, track problem resolutions and retests for resolution with the consensus of the TAG

5.7.3.2 Test Execution Entrance Criteria

- Baselined test plans for each participant
- Test Scripts for testing for each participant
- Friendlies preparation

- Operationally ready and available interfaces and systems required for the testing
- Executed system and access agreements, including assignment of required sign-on accounts and passwords
- Appropriate SME staff
- Sufficient establishment of the Arizona Performance Measures

5.7.3.3 Test Execution Exit Criteria

- All test Scripts executed and classified as "pass" according to the plan
- No outstanding major problems, as determined and concurred by the third party and the ACC

5.8 Retail Parity Evaluation Success Criteria

This Test will depend on the following success criteria:

- What assurance does the Pseudo-CLEC Service Representative have that the order, with an eligible service type, will flow through once released versus the assurance the Qwest Service Representative has?

- Is the time and effort to perform pre-order queries substantially the same for Pseudo-CLEC and Qwest Service Representatives?

- Is the level of pre-order to order integration substantially the same for Pseudo-CLEC and Qwest Service Representatives?

- Is the data on the screens presented to the Pseudo-CLEC Service Representative sufficiently equivalent to the data presented to the Qwest Service Representative?

- For service to be installed in the same serving area, are equal facilities available for the Qwest Service Representative and the Pseudo-CLEC Service Representative?

- Is the procedure used to reserve large blocks of TNs equivalent for both a Pseudo-CLEC Service Representative and a Qwest Service Representative?

- For service to be installed in the same serving area, are reasonably similar due date intervals experienced by the Qwest Service Representative and the Pseudo-CLEC Service Representative?

- Is an equal opportunity provided to the Pseudo-CLEC Service Representative and the Qwest Service Representative to expedite due dates?

- Is the procedure to obtain and/or reserve a "vanity" TN equivalent for both a Pseudo-CLEC Service Representative and a Qwest Service Representative?

- Is the ability to make a change on a pending order equal for both a Pseudo-CLEC Service Representative and for a Qwest Service Representative?

- Is an equal ability provided to both the Pseudo-CLEC Service Representative and the Qwest Service Representative to query status of a pending service order?

- For "working left-in" situations, does IMA provide the Pseudo-CLEC Service Representative an equivalent amount of status information as is provided to the Qwest Service Representative?

- Are the hours of system availability the same for Pseudo-CLEC Service Representatives and for Qwest Service Representatives? The determination will factor in the purposes for which the interfaces are up and available within Qwest.

5.9 Retail Parity Evaluation Assumptions

- The Retail Parity Evaluation will not require end-to-end processing to billing; orders generated for the Retail Parity Evaluation can be cancelled in the Service Order Processing (SOP) systems once the test case is complete.

- Time measurements will be established only for cases where accurate comparisons can be accomplished.

- The assumptions related to Friendlies in Section 4.8 for the Functionality Test apply to the Retail Parity Evaluation.

6. Capacity Test

6.1 Capacity Test Purpose

The Capacity Test will validate that Qwest's OSS Systems and processes for pre-order and ordering transactions can predictably handle loads equal to or

greater than those projected by the various CLEC participants for estimated volumes projected one year from the date of the running of the Capacity Test. While some limited aspects of Qwest's provisioning processes will be evaluated, the test will pass no judgement on the capacity of Qwest's provisioning processes. For the Capacity Test, it is assumed that Qwest will provision CLEC service requests in parity with retail operations. The Capacity Test is different from the Functionality Test, since it is constructed of a repeatable, controlled, and usually simulated test load. Volumes for this testing effort will be established by the Test Administrator with Qwest and CLEC input. The forecast information will be used to determine the appropriate number and mix of accounts, transactions, and test iterations. Issues addressed by the Capacity Test include:

- System capacity testing, i.e. testing using load generators to verify the capacity of designated Qwest OSS
- System scalability, i.e. the ability of Qwest systems to handle a growth rate that may be higher than anticipated
- Staff scalability, i.e. the ability of Qwest personnel staffing processes to handle a growth rate that may be higher than anticipated

6.2 Capacity Test Scope

For the purposes of the Capacity Test, Qwest's OSS interfaces will be tested, including both the EDI and the IMA GUI interfaces. The Test Administrator will, with CLEC and Qwest input, determine the parameters involved in conducting the capacity tests of the Qwest systems. A balance between simplicity of testing and statistical soundness of the analysis must be reached in determining the appropriate test conditions.

The Capacity Test will include tests for evaluating the capacity of Qwest's pre-order, ordering, and provisioning OSS interfaces for resale, UNE-P, UNE-loop, UNE-loop with number portability, and number portability. Testing will be performed with Qwest's electronic gateways, including both IMA and EDI gateways.

For each of the tests and for each electronic gateway in the pre-order, order, and provisioning process, the Capacity Test will evaluate the following:

- Selected performance measures for which the appropriate capacity measure is established
- Standard computer metrics (such as processor utilization)

- OSS scalability, including procedures for capacity expansion and estimates of the largest volume that the OSS configuration accepts under normal conditions

During the Capacity Test, the scalability of each interface involved in the test must be evaluated. For each system in the test, Qwest should demonstrate its approach to scalability to ensure that future volume growth can be properly planned for before existing resources are exhausted.

6.3 Capacity Test Coverage and Scenarios

Capacity Test coverage and associated Scenarios will include a representative mix of the pre-order queries and order transactions tested in the Functionality Test.

For the pre-ordering Capacity Test, the workload will consist of an equal number of the query types listed below:

- Address Validation
- Customer Service Record (CSR)
- Service and Feature Availability
- Appointment Scheduling Inquiry
- Facility Availability
- Telephone number inquiry

For the ordering Capacity Test, a representative mix of clean LSRs and LSRs with errors will be used. The test will validate the capacity of the systems to process typical commercial LSRs in a production environment, and not the functionality across extensive LSR types. Test conditions that provide for mechanized error and rejections will be included.

Special conditions, such as future dates on LSRs, may be placed on the test transactions so that production processing is not adversely affected. The special conditions will also provide an alternative method for identifying test orders for data extraction and test clean-up activities.

Test Scenarios were further defined once the Test Administrator and the Pseudo-CLEC were selected.

6.4 Capacity Test Volumes

The Test Administrator will be responsible for determining the appropriate volumes for the Capacity Test, based on historical data and forecasts for one year beyond the start of the Capacity Tests, derived from input from Qwest and CLECs. In addition, the specific hour-by-hour volume requirements will also be determined by the Test Administrator and communicated to the participating CLECs. The volume units for orders are LSRs, while the units for pre-orders are service queries. Factors utilized in test volume determination include:

- The number of CLEC pre-order queries for each LSR
- A loading factor for Arizona, considering that the systems are utilized for all Qwest states, if necessary
- A loading factor to account for forecast error
- An estimate of hourly volumes and busy hour considerations

To attain a satisfactory volume of transactions, the test mix may contain replications of transactions. Replications are inputs which are essentially the same, but which contain different data so that they are unique for the purpose of the test.

6.5 Capacity Test Data

Each participating CLEC may and the Pseudo-CLEC will provide the input data for executing the Capacity Test. In other third party OSS testing, participating CLECs have used test simulators to effectively generate the required volumes of tests. As mentioned above, replication of transactions will most likely be required to attain a satisfactory volume of transactions.

The Capacity Test should be run with clean (error-free) LSRs to ensure that the focus is on transaction volumes and not functionality. However, a number of error LSRs (to be determined by the TAG with input from the Pseudo-CLEC) will be inserted as part of the test. The input 'seed' data will consist of data that has passed through the pre-order and order portions of the Functionality Test without error, and will then be 'replicated' as necessary by CLEC simulators and the Pseudo-CLEC to provide adequate volumes.

6.6 Capacity Test Participants

Although the Capacity Test participants are the same participants as outlined in Section 4.6 for the Functionality Test, the involvement of Qwest in the Capacity Tests will be limited. The Capacity Test schedule of what tests are to be done

on which days and times, and the frequency of those tests will not be known in advance by Qwest. Therefore, scheduling activities and actual schedules for the execution of the Capacity Tests will be blind to Qwest. The Pseudo-CLEC will play an important role in this test, because transaction generator software will be necessary for generating many replicated transactions to meet the volume requirements.

6.7 Capacity Test Phases

The purpose of this section is to detail the types of activities required in each of the Capacity Test phases: Test Planning, Test Preparation, Test Execution, and Test Analysis and Reporting. These activities will be tracked in an overall project plan to be created and maintained by the Test Administrator.

6.7.1 Test Planning

This section documents the activities, entrance criteria, and exit criteria required for the Capacity Test Planning Phase.

6.7.1.1 Test Planning Activities

- Define test participants roles and responsibilities including the Pseudo-CLEC
- Define the Test Scenarios
- Establish the appropriate testing volumes
- Determine the appropriate resources to support the test preparation and execution phases
- Define and validate the test plans: Test Plans should include the test environment description, entrance and exit criteria, test execution schedule, and the approach for generating LSRs

6.7.1.2 Test Planning Entrance Criteria

The following are the entrance criteria to the Capacity Planning phase. There must be a firm understanding of the technical basis and objectives of the test before the rest of the planning can be completed.

- Definition and appropriate adjustment of workload mix and volumes
- Determination of the systems involved in the test
- Determination of participants
- Finalization of success criteria

- Determination of the times of day for testing, including times of low system activity and normal business hours

6.7.1.3 Test Planning Exit Criteria

- Baselined test plan for each participant
- Test specifications for each participant
- Defined schedule, including critical path items

6.7.2 Test Preparation

This section documents the activities, entrance criteria, and exit criteria required for the Capacity Test Preparation Phase.

6.7.2.1 Test Preparation Activities

The Test Preparation Phase requires that the Test Administrator prepare Test Scripts outlining the input and the definition of expected observations for pre-ordering and ordering. Once the Scripts are written, the Test Administrator will review and approve the Scripts.

6.7.2.2 Test Preparation Entrance Criteria

- Valid and reviewed test plans for each participant
- A production test environment
- A scheduled date for the tests

6.7.2.3 Test Preparation Exit Criteria

This phase requires Test Scripts for pre-order and order activities validated by the Test Administrator. A review session is required.

6.7.3 Test Execution

This section documents the activities, entrance criteria, and exit criteria required for the Capacity Test Execution Phase.

6.7.3.1 Test Execution Activities

Pseudo-CLEC will do the following:

- Execute the Test Cases according to the test plans

- Capture and record all relevant data

Qwest will provide the following:

- Performance Measurement calculations based on Capacity Test data

6.7.3.2 Test Execution Entrance Criteria

- Test Scripts for the pre-order tests
- Test Scripts for the order tests
- Mechanisms to verify test results and to maintain a permanent record
- Performance Measures process sufficiently evaluated by the Test Administrator

6.7.3.3 Test Execution Exit Criteria

A review session with all participants is required to complete this phase. The Execution Phase is complete when the Test Administrator concurs that the following conditions are met:

- All test specifications are executed and classified as Passed/Failed according to plan
- No outstanding major problems exist, by definition and concurrence of the Test Administrator and the ACC
- No unresolved escalated issues exist

6.7.4 Test Analysis and Reporting

This section details the activities, entrance criteria, and exit criteria required for the Capacity Test Analysis and Reporting Phase.

6.7.4.1 Test Analysis and Reporting Activities

- Analyze executed Test Cases and ensure that all Test Cases were executed and no major issues are outstanding
- Evaluate the system capacity versus forecasted load
- Evaluate whether the systems met the expectations of the Performance Measurement criteria
- Prepare a Report for the ACC

6.7.4.2 Test Analysis and Reporting Entrance Criteria

This phase requires the outcomes recorded in the Test Scripts (i.e., a successful execution).

6.7.4.3 Test Analysis and Reporting Exit Criteria

A review session is required to complete this phase. Completion of the Capacity Test will be documented in two reports to the ACC: one from the Pseudo-CLEC, and a second called the Test Administrator's Evaluation Report, which will include the validated analysis of the participants' reports.

6.8 Capacity Test Success Criteria

- The relevant performance measures standards met
- All tested Qwest OSS handled the offered load
- The Capacity Test execution did not cause application or system failures
- Non flow-through orders will not be processed

6.9 Capacity Test Assumptions

- Pre-Ordering and Ordering Capacity Tests can be executed independent of each other
- The volume mix and arrival rate will be based on forecasted expectations for one year beyond the date of the test
- A subset of the Functionality Test orders will be used for the Capacity Test. The orders will be replicated to provide the required volume and mix. Purchase Order Number (PON), Telephone Number (TN), Appointment Date, Name, and Address fields will be 'parameterized' (i.e., the value of the parameter will change for an instance of the test) so as to achieve the volume needs of the test
- No new interconnect Service Center personnel will be added solely for the Capacity Test

6.10 Systems Scalability

Qwest pre-order and order activities depend on the capabilities of certain computer systems. The Test Administrator will perform a system scalability analysis to determine if Qwest has adequate procedures for scaling their systems so that they will have adequate capacity to handle CLEC loads. The System Scalability Evaluation will include an examination of the OSS interfaces, systems that support the interfaces, and databases that are accessed in order to provide the necessary information for the OSS function.

Included in this review are the following:

- Evaluate the procedures for tracking OSS load and capacity
- Evaluate the procedures for forecasting future OSS load
- Evaluate the process for providing OSS computer growth

The System Scalability Test will also evaluate the backup, security, disaster recovery and procedures that guide the Qwest staff in executing the OSS interface data security processes.

6.11 Staff Scalability

Qwest pre-order and order activities also depend in many cases on manual processes to adequately meet their CLEC customer demand. The Test Administrator will perform a staff scalability analysis to determine if Qwest has the ability to increase the number of personnel available to perform these manual functions. Included in this review are the following:

- Evaluate the procedural framework that Qwest has in place to develop force models for its CLEC support centers
- Evaluate the volume contingency plans that Qwest has in place to meet dramatic increases in CLEC order volume
- Evaluate the disaster recovery plans that Qwest has in place to assure continued operations
- Evaluate the scalability of recruiting and training programs that Qwest has in place to provide for the availability of staff with the necessary skills to adequately perform the manual support functions.

7. Relationship Management Evaluation

7.1 Relationship Management Purpose

The Relationship Management Evaluation is a “process test” to ensure that Qwest’s CLEC Account Establishment/Maintenance, CLEC Account Management, CLEC Training, Interface Development, and Change Management Processes are appropriately conducted and communicated to CLECs effectively, based on defined procedures and documentation in place at the time of the evaluation.

7.2 Relationship Management Evaluation Scope

The Relationship Management Evaluation will examine the processes associated with the business relationships between Qwest and the CLEC community. Five business operations areas will be evaluated: CLEC Account Establishment, CLEC Account Management, EDI and IMA Interface Development, and Qwest OSS Co-provider Industry Change Management Process (CICPM).

CLEC Account Establishment

This evaluation will examine methods and procedures provided by Qwest for establishing a new CLEC customer. The evaluation will focus on the available documentation accessible to a CLEC business and on consultative assistance that Qwest provides to a CLEC in getting additional documentation.

CLEC Account Management

The CLEC Account Management evaluation will examine the methods, procedures and actions provided by Qwest for managing their business relationship with the CLECs. The evaluation will examine Responses to Account inquiries, Help Desk Call Processing, Help Desk call closures, Help Desk Status Tracking, Problem Escalation, Forecasting, and Communications.

CLEC Training Evaluation

The scope of the CLEC Training Evaluation is to evaluate the availability of training schedules, the frequency of training on the various areas where training is offered, the detail of the training curriculum and the effectiveness of the training content.

Interface Development

This evaluation will examine the documentation, specification and consultative assistance provided by Qwest to CLECs for use in building an EDI interface or installing IMA. This test will also include an evaluation of the test environment Qwest provides CLECs for pre-testing their EDI interfaces.

Qwest OSS Change Management Process Evaluation

The Qwest OSS Change Management Process will be examined to ensure that Qwest's systems and/or processes for change management are appropriately and effectively conducted and communicated to the CLEC's, based on the

defined change management procedures. The Change Management (CM) Evaluation will evaluate Qwest Methods and Procedures used to communicate with the CLECs in regard to Qwest's OSS performance and system updates, and by which it processes changes. The result of this effort will be the evaluation of the CM process, validation that it works as stated, and a Change Management Report stating the findings.

This process evaluation validates that Qwest properly communicates its change management methods and procedures for system performance and system updates to each of the CLECs. This is a cooperative process for the CLECs and Qwest to identify, communicate, and track OSS interface new functionality, enhancements to existing functionality, and required code maintenance included in software releases.

This evaluation is essential to ensure that the CLECs are:

a) Provided with notice of pending system changes,
b) Provided with notice far enough in advance to be prepared when the enhancement is implemented
c) Have a communication process between themselves and Qwest for resolving problems that arise in relation to system upgrades.

~~7.1.1~~7.2.1 CLEC Account Establishment Evaluation

The Test Administrator will validate the procedures, and monitor and evaluate Qwest's execution of them. This evaluation will be used to ascertain the comprehensiveness of the published methods and procedures for establishing and maintaining a CLEC account. The methods and procedures will be evaluated on how appropriate the instructions are for completing necessary paperwork and what information is contained in the documentation.

The activities that will be performed in conducting the CLEC Account Establishment Evaluation are as follows:

a) Gather Qwest CLEC Account Establishment documentation
b) Review and evaluate the account establishment and maintenance documentation provided by the Pseudo-CLEC
c) Perform Qwest, Pseudo-CLEC, and CLEC personnel interviews
d) Document observations

Gather Documentation

The Qwest CLEC Account Establishment documentation will be retrieved from the Qwest web site or will otherwise be provided by Qwest. The Test Administrator will gather the documentation through network access and through contacts with Qwest.

Review and Evaluate Documentation

This review will evaluate the overall policies and practices for establishing and maintaining the account relationship. The Pseudo-CLEC will keep records of their account establishment experiences. The Test Administrator will review and evaluate that documentation and compare it to the documented Qwest processes.

Performance Interviews

The Test Administrator will perform interviews with the Pseudo-CLEC, participating CLEC's and Qwest personnel to document the experiences encountered when establishing a new CLEC account.

Document Observations

All observations will be documented and reported in the Relationship Management summary report.

7.2.1.1 Entrance Criteria

a) CLEC Account Establishment and Maintenance documentation is available
b) Standard Interconnection Agreement Template
c) Customer Questionnaire Template
d) Access to Qwest, Pseudo-CLEC, and CLEC personnel
e) Pseudo-CLEC Interconnection Agreement
f) Pseudo-CLEC Customer Questionnaire
g) Evaluation Criteria and Checklist
h) Interview Questionnaire

7.2.1.2 Exit Criteria

a) Completed checklists and questionnaires
b) Documentation on results of observations
c) Summary report including an Inventory of Documentation

~~7.1.2~~7.2.2 CLEC Account Management Evaluation

The CLEC Account Management test will evaluate the methods, procedures and actions provided by Qwest for managing their business

relationship with the CLECs. The evaluation will examine Responses to Account inquiries, Help Desk Call Processing, Help Desk call closures, Help Desk Status Tracking, Problem Escalation, Forecasting, and Communications.

The activities that will be performed in conducting the CLEC Account Management Evaluation are as follows:

a) Gather Qwest CLEC Help Desk, Forecasting, Communications, and other Account Management Process Documentation
b) Review and evaluate the account documentation provided by Qwest
c) Perform Qwest, Pseudo-CLEC, and CLEC personnel interviews
d) Document observations

Gather Documentation

The Qwest CLEC Help Desk, Forecasting, Communications, and other Account Management Process documentation will be retrieved from the Qwest web site or will otherwise be provided by Qwest. The Test Administrator will gather the documentation through network access and through contacts with Qwest.

Review and Evaluate Documentation

This review will evaluate the Qwest Processes and practices in managing the CLEC account relationship. The Test Administrator will review and evaluate the clarity and sufficiency of Qwest's Process documentation. The ultimate evaluation will be based on many factors, one of which will be the documentation.

Perform Interviews

The Test Administrator will perform interviews with the Pseudo-CLEC, participating CLEC's and Qwest personnel to document the experiences encountered in regards to Responses to Account inquiries, Help Desk Call Processing, Help Desk call closures, Help Desk Status Tracking, Problem Escalation, Forecasting, and Communications

Document Observations

All observations will be documented and reported in the Relationship Management summary report.

7.2.2.1 Entrance Criteria

a) CLEC Help Desk, Forecasting, Communications, and other Account Management Process documentation is available
b) Access to Qwest, Pseudo-CLEC, and CLEC personnel
c) Evaluation Criteria and Checklist
d) Interview Questionnaire

7.2.2.2 Exit Criteria

a) Completed checklists and questionnaires
b) Documentation on results of observations
c) Summary report including an Inventory of Documentation

~~7.1.3~~7.2.3 CLEC Training Evaluation

This test will be used to determine the availability of training schedules to the CLECs, how often this information is made available and in what formats this information is offered. The frequency of training on different topics and the curriculum will also be evaluated. The documentation that is readily available to the CLECs will be used in this test.

The CLEC Training Evaluation will include the following activities:

a) Gather Qwest published training documentation
b) Review and evaluate training documentation provided to the Pseudo-CLEC
c) Document observations of training classes

Gather Documentation

The Qwest training schedules and associated documentation will be retrieved from the Qwest web site or otherwise be provided by Qwest. The Test Administrator will perform the gathering of the documentation through network access and through contacts with Qwest.

Review and Evaluate Documentation

The Pseudo-CLEC will keep records of its Qwest training. The Test Administrator will review and evaluate that documentation and compare it to the Qwest documentation. Interviews will be conducted with the Pseudo-CLEC personnel to determine the comprehensiveness of the training they received.

Document Observations

All observations will be documented and reported in the Relationship Management summary report.

7.2.3.1 Entrance Criteria

a) Training Schedules
b) Published syllabuses and handbooks
c) Evaluation Criteria and Checklist
d) Interview Questionnaire
e) Pseudo-CLEC documentation of training

7.2.3.2 Exit Criteria

a) Completed checklists and questionnaires
b) Documentation on results of evaluation of training information provided by Qwest
c) All findings and results will be documented in the Relationship Management Summary report

7.2.4 Interface Development Evaluation

The Interface Development Evaluation is an evaluation of the Qwest Interface Development and Implementation Documentation for EDI and IMA GUI installation. The Test Administrator will perform this evaluation with involvement by Qwest, the CLECs, and the Pseudo-CLEC.

The Interface Development Evaluation will involve the following activities:

a) Gather documentation
b) Review and evaluate documentation
c) Monitor and evaluate Qwest's processes and procedures supporting CLEC interface development (EDI) and implementation (EDI and IMA) efforts
d) Attend Qwest/CLEC or Qwest/Pseudo-CLEC interface technical meetings
e) Document observations
f) Determine whether Qwest provide CLEC adequate access to testing facilities that enable CLECs to implement the EDI interface

Gather Documentation

The Qwest EDI Interface Process and EDI development related documentation will be retrieved from their web site or provided by Qwest. Additionally, the IMA Implementation Process and associated implementation documentation will also be retrieved. The Test Administrator will perform the gathering of the documentation through network access and through contacts with Qwest.

Review and Evaluate Documentation

The Qwest Interface Development Process documentation will be reviewed and evaluated by the Pseudo-CLEC and Test Administrator. The observations of the Pseudo CLEC will be documented and will be included in the summary report. The focus will be on the clarity, completeness and sufficiency of the information Qwest makes available to CLECs for developing EDI and installing the IMA OSS interfaces.

Monitor and Evaluate Qwest's Processes Supporting CLEC Interface Development

The monitoring process will be conducted at Qwest facilities, CLEC facilities, and Pseudo-CLEC facilities. The Test Administrator will observe the processes for design and development of an EDI interface and the processes for design, development testing and implementing an IMA GUI Interface to the Qwest OSS. The Test Administrator will conduct interviews with Qwest, the Pseudo-CLEC, and CLEC personnel. This will be a cooperative process to identify, discuss, and track OSS interface development and implementation activities in progress. The monitoring evaluation will attempt to answer the following questions:

a) Are Qwest processes, timing and communications governing the development of an EDI interface to Qwest's OSS or implementing a Qwest IMA GUI interface to the Qwest carried out in accordance with the Qwest processes and procedures published and available to the CLECs?

b) Are the terms and definitions utilized in the EDI development and IMA GUI implementation documentation published and available to the CLECs?

c) Can the CLECs and the Pseudo-CLEC obtain documentation relating to building an interface and/or configuring service to the Qwest EDI and IMA GUI interfaces? Is the documentation clear, accurate, and sufficient to build the interface?

d) Are meetings to discuss interface development reasonably scheduled and attended by Qwest subject matter experts?

Attend EDI Interface Development Meetings

With Qwest and CLEC or Pseudo-CLEC permission, the Test Administrator will attend EDI Interface Development meetings to gather information and evaluate Qwest's relationship with the parties involved in the CLEC EDI Development process.

Document Observations

All observations will be documented and reported in the Relationship Management summary report.

7.2.4.1 Entrance Criteria

a) Qwest's documented Development processes and Technical Documentation for EDI development and IMA Installation/Configuration
b) Evaluation criteria and checklists
c) Interview Questionnaire

7.2.4.2 Exit Criteria

a) Completed checklists and questionnaires
b) Documentation on results of evaluations and observations
c) Summary report

7.2.5 Change Management Process Evaluation

The Change Management Process Evaluation is an evaluation by the Test Administrator with involvement by Qwest, the CLECs, and the Pseudo-CLEC. The Methods and Procedures (M&P) established by Qwest will be acquired. Qwest will be monitored and evaluated on its adherence to its published M&P for change management. Following the collection of documentation, the Test Administrator will identify,

discuss, and track available instances of specific OSS Interface new functionality, enhancements and maintenance.

The activities of this evaluation will include:

a) Gather documentation
b) Review and evaluate documentation
c) Monitor and evaluate Qwest's ability to execute change management method and procedures for a significant software release
d) Attend regularly scheduled change management meetings
e) Document observations

Gather Documentation

The Qwest Change Management Methods and Procedures (M&P) will be retrieved from their web site or provided by Qwest. The Test Administrator will perform the gathering of the documentation through network access and through contacts with Qwest.

Review and Evaluate Documentation

The Qwest change management process documentation will be reviewed and evaluated by the Test Administrator. The observations by the Test Administrator will be documented and will be included in the summary report. The evaluation will attempt to answer questions relating to Qwest's effectiveness in managing changes to their OSS systems supporting CLECs.

Monitor and Evaluate

The Test Administrator will monitor the execution of the Change Management procedures based upon the observation criteria. The purpose of this process is to ensure that Qwest is adhering to the methods and procedures it has established. It is imperative that the CLECs be provided with advance notice to system changes and enhancements and a test environment to test system changes prior to implementation. Without proper lead-time and a test environment the CLECs will not be prepared to meet the user requirements of the changes or enhancements.

The monitoring process will be conducted at Qwest facilities, CLEC facilities, Pseudo-CLEC facilities and through the CICMP monthly meetings held by Qwest. The Test Administrator will observe the process in action by Qwest, will conduct interviews with Qwest and CLEC personnel, and attend monthly Qwest CICMP meetings. This

will be a cooperative process to identify, discuss, and track OSS interface new functionality, enhancements to existing software, and required code maintenance. The monitoring evaluation will evaluate Qwest's execution of their published Change Management Processes for OSS systems used by the CLECs.

Attend CICMP Meetings

The Test Administrator will attend monthly CICMP meetings to gather information and evaluate Qwest's change management process.

7 2.5.1 Entrance Criteria

Qwest's documented change management procedures

a) Evaluation criteria and checklists
b) Interview Questionnaire

7.2.5.2 Exit Criteria

a) Completed checklists and questionnaires
b) Documentation on results of evaluations and observations
c) Summary report

8. Performance Measurement Evaluation

8.1 Performance Measurement Evaluation Purpose

The Performance Measurement (PM) Evaluation is designed to provide the ACC with a statistically valid assessment of Qwest's performance in providing service to the CLECs based on established performance measures. The Performance Measurements define those standards set by the ACC that Qwest must meet in order to comply with Section 271 of the Act.

Performance Measures fall into three broad categories: parity, benchmark, and report only. Parity measures show that Qwest's OSS systems allow parity access for competing CLECs. Benchmarks define a level of performance for service provided to a CLEC for which there is not an equivalent function within Qwest. The report-only category is provided for those measures that the Commission or other regulatory body determined were of interest but were used for diagnostic purposes, often because they back-up other Performance

Measures. The report only category also includes measures for which there is not yet sufficient information or the need to set a benchmark.

The evaluation of Qwest's Performance Review falls into 4 components:

- PM Process Review
- Historical Evaluation
- Functionality Test Evaluation
- Capacity Test Evaluation

8.2 Performance Measurement Evaluation Scope

In its Statement of Generally Available Terms, Qwest has committed to provide results of the performance measurements listed in Appendices B and C. The ACC, with CLEC and Qwest input, established final Performance Measurement criteria (benchmarks) for Qwest in the OSS workshops. Appendices B and C are summarized in the following paragraphs.

- Appendix B contains detailed descriptions of Qwest's performance measurements. Each page lists: (1) the indicator number for the measurement, (2) the name of the measurement, (3) the purpose of the measurement, (4) a detailed description of the measurement, (4) the formula used to compute the result of the measurement, (5) relevant notes and explanations, and (6) the measurable standard for the measurement.

- Appendix C lists the performance measurements and indicates which will be included in the Functionality Test and in the Capacity Test. The Functionality Test is comprised of OSS functionality testing and end-to-end functionality testing. Only those measurements with a Yes indication will be considered during the Functionality and Capacity Tests. Those measurements will also be evaluated during the Performance Measurement Evaluation to verify that Qwest is collecting adequate data and computing accurate results. Those measurements with No Yes indication, will only be included in the testing to the extent that they are evaluated during the Performance Measurement Evaluation to verify that Qwest is collecting adequate data and computing accurate results.

8.3 Performance Measurement Evaluation Coverage and Scenarios

The Performance Measurement Evaluation will include both an evaluation of the processes and procedures Qwest has in place for collecting data and computing the results of the performance measurements listed in Appendices B & C and an evaluation of the three most current consecutive months of data for those performance measurements. The following sections provide an overview of the Performance Measurement Evaluation:

8.3.1 Review of Data Collection Process

The Performance Measurement Evaluation will include an evaluation of the process and procedures in place to verify that data is being collected and used in a proper fashion when computing performance measures. This evaluation will include:

- Examination of documentation;
- Evaluation of Qwest's data collection, analysis and reporting processes based on Performance Indicators Definition (in Appendix B).
- Interviews of Qwest personnel; and
- Clarification discussions with CLEC representatives, where appropriate.

8.3.2 Historical Data Evaluation

The Performance Measurement Evaluation will include an examination of performance measurement data from a three-month period to determine if Qwest is correctly computing the results. The purpose of the historical data evaluation is to determine the validity of Qwest's performance measurement reporting through analysis of Qwest's calculations using the input data employed by Qwest, or to determine whether such data warrants different conclusions. This evaluation will include:

- Review of the calculation of performance measurements;
- Independent calculation of results, using data provided by Qwest;
- Calculation of z-statistics for performance measurements; and
- Comparison to z-statistics computed by Qwest.
- Determination of the extent that Qwest's historical data are consistent with the Performance Indicators Definition (in Appendix B).

8.3.3 Functionality and Capacity Test Performance Measurements

The Performance Measurements listed in Appendix C will be evaluated for the Functionality Test and the Capacity Test. For each test, data will be collected for the performance measures with a yes entry in the applicable section of the table. The table identifies the performance measures for the Functionality Test as either OSS Performance or End-to-End. This distinction is meant to clarify the role of the performance measure during test evaluation.

8.4 HISTORY OF ARIZONA 271 PERFORMANCE INDICATOR DEFINITION DOCUMENTS

The following table provides a chronology of revisions to the Performance Indicator Definition (PID) documents. As shown, there were twelve versions issued between March, 1999 and March, 2000 as a result of numerous discussions with the parties.

Performance Indicator Definition (PID) Version	Date of PID	Comments
1. First PID used in AZ workshops	Mar 99	(As part of Qwest's Arizona SGAT filing)
2. Second PID	24 Sep 99	(Used in 30 Sep – 1 Oct 99 Workshops)
3. Third PID	15 Oct 99	(Used in 21 Oct 99 workshop)
4. Version 3.1	01 Nov 99	(First AZ PID marked with version number on document)
5. Version 3.2	15 Nov 99	
6. Version 4.0	06 Dec 99	(First PID utilizing new format of standard boxes for each dimension defined)
7. Version 4.1	03 Jan 00	(With correction issued 04 Jan)
8. Version 4.2	12 Jan 00	
9. Version 4.3	24 Jan 00	
10. Version 4.4	01 Feb 00	
11. Version 4.5	18 Feb 00	
12. Version 4.6	20 Mar 00	
13. Version 5.0	12 Jun 00	
14. Version 5.1	28 Aug 00	
15. Version 6.0	13 Nov 00	
16. Version 6.1	12 Feb 01	
17. Version 6.2	09 Mar 01	
18. Version 6.3	01 May 01	

8.5 Performance Measurement Evaluation Test Plan

8.5.1 Review of Data Collection Process

Qwest will provide an explanation and documentation of its performance measurement process and procedures. The Test Administrator will validate the process and procedures and monitor Qwest's ability to execute them. If appropriate, the Test Administrator will conduct interviews of Qwest and/or CLEC personnel.

The Performance Measurement Process review conducted by the Test Administrator will answer the following questions:

a) Are the Qwest documented performance measure business rules, gathering methods and procedures sufficient to ensure that the data elements gathered are accurate and complete?

b) Are any of the Qwest data gathering or calculation processes manual? If so, are Qwest manual data gathering and calculation processes sufficiently documented to ensure completeness, proper disaggregation, and accuracy?

c) Does the Qwest performance measures process documentation contain proper information mapping data elements needed to compute each performance measure to a specific Qwest system?

d) Are the Qwest documented data gathering and exclusion business rules consistent with the PID?

e) Are the Qwest calculations performed as defined in the PID?

f) Are Qwest supervisory review processes adequately documented and practiced to ensure calculation compliance in place and adequate to ensure the continuing accuracy of calculations?

g) Are documented Qwest change control procedures in place to ensure that changes to data are tracked and available for review? Are these sufficient?

h) Is the Qwest Performance Measurement Report Version Control Process documented, sufficient and practiced?

i) Are historical logs available for changes to reported performance measures?

j) Do procedures for changing data include appropriate change/version control? Are these procedures documented and consistent with the PID?

k) Are Performance Measurement Reports currently available on the Qwest web-site? If no, does Qwest have plans to post Performance Measurements on their web-site? If so, are clearly written posting processes and change management processes documented and in practice?

8.5.2 Historical Data Evaluation

Qwest will provide performance measurement raw data from a three consecutive month period. The Test Administrator will validate the process and procedures and monitor Qwest's ability to execute them. If appropriate, the Test Administrator will conduct interviews of Qwest and/or CLEC personnel.

8.5.3 Functionality Testing and Capacity Testing

During Functionality Testing and Capacity Testing, Qwest will provide appropriate performance measure data and results. The Test Administrator will verify such data and incorporate the results into the Functionality Testing and Capacity Testing. The Test Administrator will acquire and/or develop data, calculate Functionality and Capacity test results, and validate results of Qwest, Pseudo-CLEC and CLEC analyses

8.6 Performance Measurement Evaluation Entrance and Exit Criteria

The entrance criteria for this test include the Qwest documented processes and procedures for the enumerated performance measurements listed in appendices B and C. Exit criteria will include a final report that performance measurement collection, analysis and reporting processes as reviewed by CGEY TMN are fully compliant with the performance measurements contained in the PID. Exiting this test will include a review session where all observed activities, data and results will be reviewed for validity. The actual exit criteria will be an outcome report generated by the Test Administrator detailing observations regarding Qwest's performance measurements

8.7 Performance Measurement Evaluation Participants

The Performance Measurement Evaluation participants are the same participants as outlined in Section 4.6 for the Functionality Test with the exception that Friendlies will not be involved. The Test Administrator will play an important role in this test in that it will perform the evaluation of the performance measurement data and calculations provided by Qwest.

8.8 Performance Measurement Evaluation Assumptions

- The performance measurements to be evaluated are those enumerated in Appendices B and C, as modified by the ACC.

- The Historical Data Evaluation will be based upon three months of data for each enumerated performance measurement.

9. Roles and Responsibilities

9.1 The ACC

The role of the Commission Staff is to:

- Oversee the development of the tests
- Oversee the test process
- Define the scope of the tests
- Provide approval of baseline documents, including the Master Test Plan
- Appoint the test supervisor to oversee day-to-day activities
- Review the Test Administrator Test report and Pseudo-CLEC report and provide comment
- Make decisions on issues for which there is not agreement among parties, including issues escalated to the ACC by the TAG
- Submit Reports and make a recommendation to the ACC.

9.2 DCI

The responsibilities of DCI will include:

- Act with/for the ACC to establish the draft and final Master Test Plan
- Provide ongoing counsel and technical support to the ACC throughout the testing process
- Maintain communications among all interested parties and manage the flow of information among parties as directed or approved by the Commission Staff
- Apprise the Third Party Test Administrator and the Commission Staff of its communications with all parties or TAG participants on a weekly basis and any conclusions reached
- Assist the ACC in overseeing the test process and in evaluating test results and recommendations

9.3 Test Administrator

As part of its role of oversight or audit, the Test Administrator will:

Provide final input to the Master Test Plan, including development and validation of:

Functional Test coverage and scenarios.

Parity Test coverage and scenarios.

Capacity Test coverage and scenarios.

Change Management methods and processes.

Scalability of Qwest interfaces.

- Ensure that Qwest is following established business rules, and accurately collecting data and computing performance measurement results.
- Monitor test sites and activities, the test planning schedule, test execution schedule, overall project schedule and baseline documents.
- Prepare test planning schedule test execution schedule, and overall project schedule.
- Track testing action items.
- Assign accountabilities and track resolution of issues/problems identified.
- Collect test status from Qwest, Pseudo-CLEC and participating CLECs and report status to the ACC.
- Provide day-to-day supervision of the test program, including supervision of Friendlies.
- Analyze test results.
- Submit a report of results and its evaluation to the ACC, explicitly describing results of each of the five tests (e.g. functionality, capacity, etc.) and its evaluation for each, as well as overall results and overall evaluation.
- Provide technical advice to all test participants.
- With the TAG, ensure that testing is conducted in such a way as to achieve blindness to Qwest.
- Maintain the level of openness in its contacts with Qwest specified in Exhibit F and submit to the TAG and ACC on a bi-monthly basis a report of its incidental contacts with Qwest.

9.4 Participating CLECs

Participating CLECs will have the following responsibilities:

- Provide input to the final Master Test Plan, through the TAG
- Provide input to the test specifications.
- Provide input to the test execution plans.
- Provide for test execution.
- Provide test support and SMEs as necessary to the Test Administrator.

9.5 Pseudo-CLEC

The Pseudo-CLEC will have the same responsibilities as the participating CLECs above, but will also have responsibility for the following:

- Build an application-to-application OSS interface necessary for the testing (based upon baseline documentation provided by Qwest).
- Review and evaluate Qwest documentation of EDI, IMA and EB-TA interfaces.
- Document the relative ease or complexity of creating the interface.
- Electronically submit pre-order inquiries, service order request (LSRs), associated trouble reports, and other transactions through Qwest OSS interfaces.
- Receive various Qwest confirmations, jeopardy notices, completion notices and responses back from querying the various OSS functions.
- Build the capability to deliver and receive a volume of transactions, including pre-order, local service requests (LSRs), and trouble reports to allow for functionality and capacity testing of the Qwest OSS systems, including manual processes when electronic processes fail, or as designed and specified in the Master Test Plan.
- Provide test results data to the Test Administrator for evaluation.
- The Pseudo-CLEC will not engage in any evaluation of test results.
- Maintain the level of openness in its contacts with Qwest as set forth in Exhibit F and submit to the TAG and ACC on a bi-monthly basis a report of its incidental contacts with Qwest.

9.6 Qwest

Qwest is a direct participant of the test with the following roles and responsibilities:

- Provide input to the final Master Test Plan.
- Provide the OSS environment to be used for the test.
- Provide subject matter expertise in a collaborative development effort with the Pseudo-CLEC, with the CLECs, with the Test Administrator and with the ACC.
- Provide technical specifications and resources to be used by the Pseudo-CLEC for establishment as a pseudo-CLEC and for customization of the transaction generation software.
- Provide personnel to input orders for cases specified in the Master Test Plan according to established methods and procedures on the retail side of the Retail Comparison Test.
- Provide support of the testing effort at the direction of the ACC. This support will include many organizations within Qwest, and tasks such as the day-to-day management of the supporting team, root cause analysis, production data and systems SME support, etc.

9.7 TAG

The role of the TAG shall be as follows:

- Conduct bi-monthly, and event related conferences, either by in-person meetings or teleconferences to inform all participants of testing progress and current status.
- Periodically review test results and offer advice, observations and provide input to the test process.
- Facilitate CLEC participation in the test process.
- Participate in the Change Management process.
- Review instances of reported exceptions and other issues as they arise. Attempt to resolve by consensus.

- As necessary, escalate exceptions to the ACC for decisions on whether or not to retest.
- As necessary, escalate unresolved issues to the ACC for decisions.
- Accept participant input on any matters related to testing, direct it to the cognizant parties, and, as necessary, process as described in the preceding bullet-points.
- The TAG, through the Test Administrator, will monitor test plans to ensure, as much as practical, that the test process is blind to Qwest.
- The TAG will adopt a Change Control Process that will be applied for the Master Test Plan including the Performance Indicator Definitions (PID) and the Test Standards Document.

10. Proposed Schedule and Timeline

A summary of the key milestones and critical path items for the success of the project is provided in the following draft timeline. This timeline is meant to represent the high-level, major milestones associated with this test and will be further detailed during test planning and placed into an overall project plan. The project plan will be modified and maintained by the Test Administrator and ACC as the Master Test Plan is finalized, and used primarily as input to track the overall milestones. All test participants will have their own internal plans to map to the overall project plan.

Task	BASELINE DATE
Submit Draft Arizona OSS Test Plan to ACC for review	Completed
Draft OSS Test Plan Finalized by ACC	Completed
Draft Arizona OSS Test Plan Distributed to Qwest and CLECs	Completed
Draft Arizona OSS Test Plan presented at 1st Workshop	Completed
Request For Proposal Distributed to Vendors (includes draft Arizona OSS Test Plan)	Completed
Responses from Vendors Due to ACC	Completed
Vendor(s) Selected And Contract Signed	10/15/99
Pseudo CLEC Startup and TG Ramp-up Process	10/15/99-12/21/99
Pseudo CLEC Information Gathering & Training	12/21/99-1/26/00
Development of test transaction generator	TBD
Test Planning –	

Task	BASELINE DATE
Submit Draft Arizona OSS Test Plan to ACC for review	Completed
Draft OSS Test Plan Finalized by ACC	Completed
Define Test Bed	TBD
Test Case Definition	TBD
Test Preparation -	
Test Bed Implementation	TBD
Test Account Mapping to Test Cases	TBD
Performance Measurement Process Evaluation	TBD
Performance Measurement Historical Data Evaluation	TBD
Test Standard Document Completion	TBD
Functionality Test Execution	TBD
Retail Comparison Test Execution	TBD
Capacity Test Execution	TBD
Test Analysis and Reporting	TBD

11. Conclusion and Summary

This OSS Test Plan defines the testing approach and strategy, as well as the entrance and exit criteria, to support each phase of testing. This document additionally defines the expectations of the test participants and provides for a collaborative approach toward OSS testing. The next required steps for defining the detailed test cases, data volume and mix, and resource requirements can begin based on the information contained in this document.

When successfully executed in a collaborative approach with the ACC, this OSS Test Plan will demonstrate Qwest's operational readiness, performance, and capacity to provide access to pre-ordering, ordering, provisioning, repair and maintenance, and billing OSS functionality to CLECs in the state of Arizona.

APPENDIX A – TEST SCENARIOS

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
Retail to UNE-P Conversion (residence)																			
1.	Retail to UNE-P	Convert 1 Res line, no features, straight line main listing	X						X			X						Main line listed – straight line main listing	No Dial tone
2.	Retail to UNE-P	Convert 1 Res line, no features, Non-pub listing	X						X				X					Main line non-pub	
3.	Retail to UNE-P	Convert 1 Res line, single feature, dual name listing	X							X				X				Main line listed – straight line main listing dual name	
4.	Retail to UNE-P	Convert 1 Res line, single feature, additional listing	X							X					X			Main line listed straight line main listing and additional listing	
5.	Retail to UNE-P	Convert 1 Res line, multiple features, non-listed	X								X					X		Main line – non-listed	
6.	Retail to UNE-P	Convert 1 Res line, multiple features, caption listing	X								X							Main line – listed with additional main line listing using caption indent	
7.	Retail to UNE-P	Convert 1 Res line, multiple features, straight line main listing and additional listing	X								X	X			X			Main line listed straight line main listing and additional listing	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
8.	Retail to UNE-P	Convert 2 Res lines, no features, non-pub listing		X					X				X					Main line non-pub for both lines	
9.	Retail to UNE-P	Convert 2 Res lines, no features, additional listing		X					X						X			Main line listed straight line main listing and additional listing for both lines	
10.	Retail to UNE-P	Convert 2 Res lines, single feature, non-listed		X						X						X		Main line non-listed for both lines	
11.	Retail to UNE-P	Convert 2 Res lines, single feature, caption listing		X						X								Main line caption indent for both lines	
12.	Retail to UNE-P	Convert 2 Res lines, multiple features, straight line main listing		X							X	X						Main line listed straight line main listing for both lines	
13.	Retail to UNE-P	Convert 2 Res lines, single feature, non-pub listing		X							X		X					Main line non-pub for both lines	
Retail to UNE-P Conversion (business)																			
14.	Retail to UNE-P	Convert 1 Bus line, no features, straight line main listing			X				X			X						Main line listed – straight line main listing	
15.	Retail to UNE-P	Convert 1 Bus line, single feature, additional listing			X					X					X			Main line listed – straight line main listing and additional listing	
16.	Retail to UNE-P	Convert 1 Bus line, multiple features, caption listing			X						X							Main line listed – caption	

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
17.	Retail to UNE-P	Convert 1 Bus line, multiple features, straight line main listing and additional listing			X						X	X			X			Main line listed – straight line main listing and additional listing	
18.	Retail to UNE-P	Convert 2 Bus lines, no features, additional listing				X			X						X			Main line listed – straight line main listing and additional listing for both listings	
19.	Retail to UNE-P	Convert 2 Bus lines, single feature, caption listing				X				X								Main line listed – caption listings for both lines	
20.	Retail to UNE-P	Convert 2 Bus lines, multiple features, straight line main listing				X					X	X						Main line listed – straight line main listing for both lines	
21.	Retail to UNE-P	Convert 2 Bus lines, multiple features, non-pub and non-listed				X					X		X			X		1 main line – non-listed and 1 main line – non-pub	
Resale to UNE-P Conversion (residence)																			
22.	Resale to UNE-P	Convert 1 Res line, no features, straight line main listing	X						X			X						Main line listed – straight line main listing	
23.	Resale to UNE-P	Convert 1 Res line, no features, Non-pub listing	X						X				X					Main line non-pub	
24.	Resale to UNE-P	Convert 1 Res line, single feature, dual name listing	X							X				X				Main line listed – straight line main listing dual name	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
25.	Resale to UNE-P	Convert 1 Res line, single feature, additional listing	X							X					X			Main line listed – straight line main listing and additional listing	
26.	Resale to UNE-P	Convert 1 Res line, multiple features, non-listed	X								X					X		Main line – non-listed	
27.	Resale to UNE-P	Convert 1 Res line, multiple features, caption listing	X								X							Main line listed and additional main line listing – caption indent	
28.	Resale to UNE-P	Convert 1 Res line, multiple features, straight line main listing and additional listing	X								X	X			X			Main line listed – straight line main listing and additional listing	
29.	Resale to UNE-P	Convert 2 Res lines, no features, non-pub listing		X					X				X					Main line non-pub for both lines	
30.	Resale to UNE-P	Convert 2 Res lines, no features, additional listing		X					X						X			Main line listed – straight line main listing and additional listing for both lines	
31.	Resale to UNE-P	Convert 2 Res lines, single feature, non-listed		X						X						X		Main line non-listed for both lines	
32.	Resale to UNE-P	Convert 2 Res lines, single feature, caption listing		X						X								Main line listed – caption for both lines	

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	**Order Type**	**Scenario**	**Res SL**	**Res ML**	**Bus SL**	**Bus ML**	**Hunting**	**EAS**	**No Features**	**Single Feature**	**Multiple Features**	**Straight Line**	**Non-Published**	**Dual Name**	**Additional Listing**	**Non-listed**	**Caption**	**Directory Listing Explanation**	**Maintenance Issue**
33.	Resale to UNE-P	Convert 2 Res lines, multiple features, straight line main listing		X							X	X						Main line listed – straight line main listing for both lines	
34.	Resale to UNE-P	Convert 2 Res lines, multiple feature, non-pub listing		X							X		X					Main line non-pub for both lines	Feature is not provisioned
Resale to UNE-P Conversion (business)																			
35.	Resale to UNE-P	Convert 1 Bus line, no features, straight line main listing			X				X			X						Main line listed – straight line main listing	
36.	Resale to UNE-P	Convert 1 Bus line, single feature, additional listing			X					X					X			Main line listed – straight line main listing and additional listing	
37.	Resale to UNE-P	Convert 1 Bus line, multiple features, caption listing			X						X							Main line listed – caption	
38.	Resale to UNE-P	Convert 1 Bus line, multiple features, straight line main listing and additional listing			X						X	X			X			Main line listed – straight line main listing and additional listing	
39.	Resale to UNE-P	Convert 2 Bus lines, no features, additional listing				X			X						X			Main line listed – straight line main listing and additional listing	
40.	Resale to UNE-P	Convert 2 Bus lines, single feature, caption listing				X				X								Main line listed – caption	Unable to accept Collect Calls

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	**Order Type**	**Scenario**	**Res SL**	**Res ML**	**Bus SL**	**Bus ML**	**Hunting**	**EAS**	**No Features**	**Single Feature**	**Multiple Features**	**Straight Line**	**Non-Published**	**Dual Name**	**Additional Listing**	**Non-listed**	**Caption**	**Directory Listing Explanation**	**Maintenance Issue**
41.	Resale to UNE-P	Convert 2 Bus lines, multiple features, straight line main listing				X					X	X						Main line listed – straight line main listing	
42.	Resale to UNE-P	Convert 2 Bus lines with multiple features, non-pub and non-listed				X					X		X			X		1 main line listing – non-listed and 1 main line listing non-pub	
42 a.	Resale to UNE-P	Convert to UNE-L			X														
42 b.	Resale to UNE-P	Convert to UNE-L	X																
Retail to Resale Conversion (residence)																			
43.	Retail to Resale	Convert 1 Res line, no features, straight line main listing	X						X			X						Main line listed – straight line main listing	
44.	Retail to Resale	Convert 1 Res line, no features, Non-pub listing	X						X				X					Main line non-pub	
45.	Retail to Resale	Convert 1 Res line, single feature, dual name listing	X							X				X				Main line listed – straight line main listing dual name	Static/Noise on Line
46.	Retail to Resale	Convert 1 Res line, single feature, additional listing	X							X					X			Main line listed – straight line main listing and additional listing	
47.	Retail to Resale	Convert 1 Res line, multiple features, non-listed	X								X					X		Main line – non-listed	
48.	Retail to Resale	Convert 1 Res line, multiple features, caption listing	X								X							Main line – caption listing	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
49.	Retail to Resale	Convert 1 Res line, multiple features, straight line main listing and additional listing	X								X	X			X			Main line listed – straight line main listing and additional listing	
50.	Retail to Resale	Convert 2 Res lines, no features, non-pub listing		X					X				X					Main line – non-pub	
51.	Retail to Resale	Convert 2 Res lines, no features, additional listing		X					X						X			Main line listed and additional listing for both lines	
52.	Retail to Resale	Convert 2 Res lines, single feature, non-listed		X						X						X		Main line non-listed for both lines	
53.	Retail to Resale	Convert 2 Res lines, single feature, caption listing		X						X								Main line listed – caption for both lines	
54.	Retail to Resale	Convert 2 Res lines, multiple features, straight line main listing		X							X	X						Main line listed – straight line main listing for both lines	
55.	Retail to Resale	Convert 2 Res lines, single feature, non-pub listing		X							X		X					Main line non-pub for both lines	
Retail to Resale Conversion (business)																			
56.	Retail to Resale	Convert 1 Bus line, no features, straight line main listing			X				X			X						Main line listed – straight line main listing	
57.	Retail to Resale	Convert 1 Bus lines, single feature, additional listing			X					X					X			Main line listed – straight line main listing and additional listing	Can't Call In

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
58.	Retail to Resale	Convert 1 Bus line, multiple features, caption listing			X						X							Main line listed – caption listing	
59.	Retail to Resale	Convert 1 Bus lines, multiple features, straight line main listing and additional listing			X						X	X			X			Main line listed – straight line main listing and additional listing	
60.	Retail to Resale	Convert 2 Bus lines, no features, additional listing				X			X						X			Main line listed – straight line main listing and additional listing	
61.	Retail to Resale	Convert 2 Bus lines, single feature, caption listing				X				X								Main line listed – caption listing	
62.	Retail to Resale	Convert 2 Bus lines, multiple features, straight line main listing				X					X	X						Main line listed – straight line main listing	
63.	Retail to Resale	Convert 2 Bus lines, multiple features, non-pub and non-listed				X					X		X			X		1 main line non-listed and 1 main line non-pub	
63A	Retail to Resale	Migrate a Retail Account to Resale. The Retail Account has ILEC Initiated Blocking	X															Straight line listing	
63B	Retail to Resale	Migrate a Retail Account to Resale. The Retail Account has an existing pending order	X															Straight line listing	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
Resale New (residence)																			
64.	Resale New	Install 1 Res line, no features, straight line main listing	X						X			X						Main line listed – straight line main listing	
65.	Resale New	Install 1 Res line, no features, non-pub listing	X						X				X					Main line non-pub	
66.	Resale New	Install 1 Res line, single feature, caption listing	X							X								Main line listed – caption	
67.	Resale New	Install 1 Res line, multiple features, dual name listing	X								X			X				Main line listed – straight line main listing dual name	
68.	Resale New	Install 1 Res line, multiple features, additional listing	X								X				X			Main line listed – straight line main listing and additional listing	
69.	Resale New	Install 1 Res line, multiple features, straight line main listing with additional listing	X								X	X			X			Main line listed – straight line main listing and additional listing	
70.	Resale New	Install 2 Res lines with no features, non-pub listing		X					X				X					Main line non-pub for both lines	
71.	Resale New	Install 2 Res lines with no features, additional listing		X					X						X			Main line listed – straight line main listing and additional listing	
72.	Resale New	Install 2 Res lines with single feature, non-listed		X						X						X		Main line non-listed for both lines	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
73.	Resale New	Install 2 Res lines with single feature, caption listing		X						X								Main line listed – caption for both lines and additional main line listing	
74.	Resale New	Install 2 Res lines with multiple features, straight line main listing		X							X	X						Main line listed – straight line main listing and additional main line listing for both lines	
75.	Resale New	Install 2 Res lines with multiple features, non-pub listing		X							X		X					Main lines non-pub for both lines	Inability to dial 555-1212
Resale New (business)																			
76.	Resale New	Install 1 Bus line, no features, straight line main listing			X				X			X						Main line listed – straight line main listing	
77.	Resale New	Install 1 Bus line, single feature, additional listing			X					X					X			Main line listed – straight line main listing	Static/Noise on Line
78.	Resale New	Install 1 Bus lines, multiple features, caption listing			X						X							Main line listed – caption	
79.	Resale New	Install 1 Bus line, multiple features, straight line main listing with additional listing			X						X	X			X			Main line listed – straight line main listing and additional listing	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
80.	Resale New	Install 2 Bus lines with no features, additional listing				X			X						X			Main line listed – straight line main listing and additional listing for both lines	
81.	Resale New	Install 2 Bus lines with single feature, caption listing				X				X								Main line listed – caption for both lines	
82.	Resale New	Install 3 Bus lines with multiple features, straight line main listing				X					X	X						Main line listed – straight line main listing for both lines	
83.	Resale New	Install 2 Bus lines with multiple features, non-pub and non-listed				X					X		X			X		1 main line non-list and 1 main line non-pub	
UNE Loop																			
84.	UNE Loop New	Install new loop			X													Non-listed	
85.	UNE Loop New	Install multiple new loops				X												Non-listed	
86.	UNE Loop Change	Change the 'CFA' on an existing loop			X													Not Applicable	
87.	UNE Loop Disc	Disconnect a loop			X													Main Line listing	
88.	UNE Loop Disc	Disconnect multiple loops				X												Main Line listing	
89.	UNE Loop Full Migr	Full migration of a single loop			X													Caption	
90.	UNE Loop Full Migr	Full migration of existing loops				X												Main Listing	Static, No Dialtone

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
91.	UNE Loop Full Migr+Add a new loop	Full migration of existing loops + add a new loop			X													Main Listing	Static , No dialtone
92. Remove. IMA does not have the capability of testing a UNE-L.	UNE Loop Out Mve	Outside move of a single loop from address a to address b – Test with IMA.																	
93.	UNE Loop Out Mve	Outside move of a single loop from address a to address b			X													Change Main listing	
94.	UNE Loop Part Migr	Partial migration of multiple loops BTN staying with Qwest				X												Add an indent to main caption	
95.	UNE Loop Part Migr	Partial migration of multiple loops BTN moving to CLEC				X												Establish main caption with indents	
96.	UNE Loop Supplement Type 1 (Cancel)																	Main listing	
UNE Loop w/NP ***Assumption: POTS Only***																			
97.	UNE Loop w/NP Full Migr	Full migration of existing multiple loops with NP				X												Not Applicable	
98.	UNE Loop w/NP Full Migr	Full migration of existing multiple loops with NP + Add a new loop				X												Not Applicable	
99.	UNE Loop w/NP Part Migr	Partial migration of existing loops with NP				X												Not Applicable	Can't receive calls-intra switch

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
100.	UNE Loop w/NP Supplement Type 2 (Due Date Change)					X												Not Applicable	
101.	UNE Loop w/NP Supplement Type 3 (All other Changes)					X												Not Applicable	
UNE NP																			
102.	UNE NP	Disconnect retail bundled service (multiple lines) and port TNs to CLEC				X												Not Applicable	
UNE LNP																			
102. A	UNE-NP	Disconnect retail bundled service and port TNs to CLEC	X															Main Listing	
102. B	UNE-NP	Disconnect retail service and port TN to CLEC		X														Main Listing	
102. C	UNE-NP	Disconnect retail service and port TN to CLEC			X													Main Listing	
102. D	UNE-NP	Disconnect retail service and port TN to CLEC				X												Main Listing	
102. E	Listing Only	Add listing for CLEC provided service	X															Main Listing	
102. F	Listing Only	Add listing for CLEC provided service			X													Main Listing	
Change UNE-P (residence)																			

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
103.	Change	Add one feature to Res 1 line account with no existing features, no changes to directory listings	X						X									Not Applicable	
104.	Change	Add one feature and remove a feature from Res 1 line account with multiple features, no changes to directory listings	X								X							Not Applicable	
105.	Change	Add 2 new features to resident multiple line account, no changes to directory listings		X							X							Not Applicable	
106.	Change	Remove 1 feature from resident multiple line account with multiple features, no directory change		X							X							Not Applicable	
107.	Change	Remove 1 feature & add a feature to resident multiple line account, no directory change		X						X								Not Applicable	
108.	Change	Change DL name on Res 1 line account with 1 feature	X							X		X						Change listing from main line listed – straight line main listing to main line non-pub	

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
109.	Change	Change DL name on Res 2 line account with multiple features		X							X	X						Change main line listed – straight line main listing DL listed name on both lines	
Change UNE-P (business)																			
110.	Change	Add one feature to Bus 1 line account with no existing features, no changes to directory listings			X				X									Not Applicable	
111.	Change	Remove and add one feature from Bus 1 line account with multiple features, no changes to directory listings			X						X							Not Applicable	
112.	Change	Add two new features to Bus 1 line account with one feature existing			X					X								Not Applicable	
113.	Change	Add 2 new features to Bus multiple line account, no changes to directory listings				X					X							Not Applicable	
114.	Change	Remove 1 feature from Bus multiple line account with multiple features, no directory listing changes				X					X							Not Applicable	

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
115.	Change	Remove 1 feature & add a feature to Bus multiple line account with one feature, no directory change				X				X								Not Applicable	
116.	Change	Add one feature and remove a feature from Bus 2 line account, no changes to directory listings				X					X							Not Applicable	
117.	Change	Change DL name on Bus 1 line account with 1 feature			X					X		X						Change main line non-list to main line listed – straight line main listing	
118.	Change	Change DL name on Bus multi-line account with multiple features				X					X	X						Change main line listed – straight line main listing DL name	
118A	Change	Change PIC/LPIC	X															None	
Miscellaneous UNE-P Residence																			
119.	Disc	Disconnect 1 Res line	X						X									Not Applicable	
120.	Disc	Disconnect 2 Res line		X					X									Not Applicable	
121.	Outside Move	Convert Qwest Retail Residence single line to UNE-P with outside move from location A to location B, change DL address	X								X	X						Main line listed – straight line main listing	

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
Miscellaneous UNE-P Business																				
122.	Disc	Disconnect 1 Bus line			X															
123.	Disc	Disconnect 2 Bus line				X			X											
124.	Outside Move	Outside move of Business UNE-P line from location A to location B			X					X								Varies by Line		
125.	Outside Move	Outside move of business multiple UNE-P line from location A to location B				X					X							Varies by Line		
126.	Outside Move	Convert Qwest Retail Business multiple line to UNE-P with outside move from location A to location B, change DL address				X					X	X						Main line listed – straight line main listing		
Private Line																				
1-SF [2]	New Connect	CLEC New Connect Private Line Order			X														Cannot dial out	
2-SF	Retail to Resale	Conversion of Qwest Private Line customer to CLEC Private Line customer; no changes to the account			X															

[2] SF = Special Service Functionality Test Scenarios

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
3-SF	Retail to Resale	Conversion of Qwest Private Line customer to CLEC Private Line customer; customer also wishes to upgrade transmission speed			X														
4-SF	Change	Existing CLEC wishes to upgrade signaling designation of its private line service			X														
5-SF	Disconnect	Disconnect Private Line			X														
ISDN																			
6-SF	New Connect	CLEC New Connect ISDN Order	X		X														
7-SF	Retail to Resale	Conversion of Qwest ISDN customer to CLEC; no changes to the account	X		X														
8-SF	Retail to Resale	Conversion of Qwest ISDN customer to CLEC Resale ISDN customer; customer also wishes to add an additional line	X		X														No Dial tone
9-SF	Changes	Existing CLEC wishes to make a change to the features on the customer's Resale BRI ISDN service.	X		X														
10-SF	Disconnect	Disconnect ISDN	X		X														

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
Centrex																			
11-SF	Retail to Resale	Conversion of Qwest POTS customer to CLEC for centrex resale services; customer wishes to add a call forward feature			X						X								No Dial tone
12-SF	New	New customer moves into Qwest territory and wishes to be served by a CLEC. The CLEC adds a centrex station for the new customer.			X														
13-SF	Change	Existing CLEC centrex resale customer wishes to add another station line with a listing for their premise			X							X							
14-SF	Disconnect (centrex station)	Existing CLEC centrex resale customer moves out of Qwest's region and disconnects service			X														
POTS PBX																			
15-SF	New Connect	New customer - CLEC adds line to CLEC's POTS PBX			X														
16-SF	Retail to Resale	Conversion (as specified) of Qwest POTS customer to CLEC as Resale POTS PBX customer			X														No Dial tone

SECTION 1: FUNCTIONALITY TEST																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
17-SF	Change	Existing customer - add a feature			X						X								
18-SF	Disconnect	Disconnect existing line from CLEC's Resale POTS PBX			X														
19-SF	Change	Add trunks to existing POTS PBX			X														
20-SF	Change	Add 10 consecutive numbers to an existing DID service			X														
XDSL Capable Unbundled Loop																				
21-SF	New Connect	CLEC New Connect xDSL Capable Unbundled Loop		X		X													
22-SF	Retail to UNE-L	Existing Qwest customer wishes to convert to a CLEC and the CLEC decides to service the customer on the basis of an xDSL capable unbundled loop		X		X													
23-SF	Disconnect	Existing CLEC customer being served on an xDSL capable unbundled loop wishes to completely disconnect service		X		X													
24-SF	Conversion	Convert Retail line to DSL			X														

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
25-SF	Conversion	Convert Access interoffice trunk to UDIT			X														
26-F	New	Add UDIT trunk			X														
Emerging Services																			
168.	New	New connect of one Enhanced Extended Loop (EEL); point-to-point configuration			X														
169.	Conversion	Convert one retail DS-1 private line to Enhanced Extended Loop (EEL) point-to-point configuration			X														
170.	New	Install one DS-1 Enhanced Extended Loop (EEL) to existing EEL service			X														
171.	New	New connect of one DS-0; specify this is an EEL in the Comment section of the ASR. (CFA required from the multiplexed termination)			X														

SECTION 1: FUNCTIONALITY TEST																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
172.	Conversion	Convert one retail DS-3 private line to Enhanced Extended Loop (EEL) point-to-point configuration			X														
173.	New	CLEC new connect of one sub-loop			X														
174	Conversion	Convert 1 Bus line to Sub-Loop			X														
175.	New	New connect of one voice/data line share			X														
176.	New	Order fiber from collocation cage to end user's serving central office (Dark Fiber)			X														
177.	Conversion	Convert 1 Bus line to voice/data line share			X														
178.	New	New Connect of voice data line			X														

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
127.	Resale POTS New Connect	New connect for residential customer. Somewhat similar to scenario 64.	X						X			X							
128.	Retail POTS New Connect	New connect for residential customer	X						X			X							
129.	Resale POTS New Connect	New connect for small business customer. Somewhat similar to scenario 76.			X				X			X							
130.	Retail POTS New Connect	New connect for small business customer			X				X			X							
131.	Resale Pots Conversion as specified	Conversion as specified for residential customer. Somewhat similar to scenario 45.	X						X			X		X					
132.	Retail POTS Win Back with Feature Addition	Win back and feature addition for residential customer	X						X			X		X					
133.	Resale Pots Conversion as specified	Conversion as specified for small business customer. Somewhat similar to scenario 58.			X				X			X			X				
134.	Retail POTS Win Back with Feature Addition	Win back and feature addition for small business customer			X				X			X			X				

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
135.	Resale Pots Conversion as is	Conversion as is for residential customer. Somewhat similar to scenario 43.	X						X			X			X				
136.	Retail POTS Win Back	Win back for residential customer	X						X			X			X				
137.	Resale Pots Conversion as is	Conversion as is for small business customer. Somewhat similar to scenario 56.			X				X			X			X				
138.	Retail POTS Win Back	Win back for Small Business customer – no change to account			X				X			X			X				
139.	Resale POTS Change Order	Change Order f or a residential customer. Somewhat similar to scenario 86.	X						X			X			X				
140.	Retail POTS Change Order	Change Order f or a residential customer	X						X			X			X				
141.	Resale POTS Change Order	Change Order f or a small business customer. Somewhat similar to scenario 86			X				X			X			X				
142.	Retail POTS Change Order	Change Order f or a small business customer			X				X			X			X				
143.	Resale POTS Disconnect	Disconnect for a residential customer. Somewhat similar to scenario 119.	X						X			X							

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
144.	Retail POTS Disconnect	Disconnect for a residential customer	X						X			X							
145.	Resale POTS Disconnect	Disconnect for a small business customer. Somewhat similar to scenario 119.			X				X			X							
146.	Retail POTS Disconnect	Disconnect for a small business customer			X				X			X							
147. REMOVE	Unbundled Loop New Connect	New Connect for a small business customer. Somewhat similar to scenario 84.																	
148. REMOVE	Unbundled Loop Conversion As Specified	Conversion as specified for a small business customer																	
149. REMOVE	Unbundled Loop Change Order	Change order for a small business customer. Somewhat similar to scenario 118.																	
150. REMOVE	CLEC LNP	LNP for a residential customer. Somewhat similar to scenario 102.																	
151. REMOVE	Unbundled Loop with LNP	LNP for a small business customer. Somewhat similar to scenario 97.																	
152.	Resale POTS Suspend	Suspend Order for a residential customer	X						X			X							

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
153.	Retail POTS Suspend	Suspend Order for a residential customer	X						X			X							
154.	Resale POTS Restore	Restore Order for a residential customer	X						X			X							
155.	Retail POTS Restore	Restore Order for a residential customer	X						X			X							
156.	Resale Repair Ticket	Create Non-design repair ticket for a residential customer	X						X			X							
157.	Retail Repair Ticket	Create Non-design repair ticket for a residential customer	X						X			X							
158.	Resale Repair Ticket	Create Non-design repair ticket for a small business customer			X				X			X							
159.	Retail Repair Ticket	Create Non-design repair ticket for a small business customer			X				X			X							
160.	Resale Repair Status	Retrieve non-design repair status for a residential customer	X						X			X							
161.	Retail Repair Status	Retrieve non-design repair status for a residential customer	X						X			X							
162.	Resale Repair Status	Retrieve non-design repair status for a small business customer			X				X			X							

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
163.	Retail Repair Status	Retrieve non-design repair status for a small business customer			X				X			X							
164.	Resale MLT	Run MLT for a small business customer	X						X			X							
165.	Retail MLT	Run MLT for a small business customer	X						X			X							
166.	Resale MLT	Run MLT for Residence Customer	X															Not Applicable	
167.	Retail MLT	Run MLT for Residence Customer	X															Not Applicable	
Private Line																				
1-SP [3]	Resale Private Line New Connect	New connect for resale Private Line small business customer.			X														
2-SP	Retail Private Line New Connect	New connect for retail Private Line small business customer			X														
3-SP	Resale Private Line Conversion	Private Line conversion as specified for a resale small business customer			X														
4-SP	Retail Private Line Win Back	Private Line Win Back (as specified) for a retail small business customer			X														

[3] SP = Special Service Parity Test Scenario

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
5-SP	Resale Private Line Conversion	Private Line conversion as is order for a resale small business customer			X														
6-SP	Retail Private Line Win Back	Private Line Win Back Order for a small business customer			X														
7-SP	Resale Private Change	Private line change order for a resale small business customer			X														
8-SP	Retail Private Change	Private Line change order for a retail small business customer			X														
9-SP	Resale Private Disconnect	Private line disconnect order for a resale small business customer			X														
10-SP	Retail Private Disconnect	Private Line disconnect order for a retail small business customer			X														
ISDN																				
11-SP	Resale ISDN New Connect	New connect for resale ISDN.	X																
12-SP	Retail ISDN New Connect	New connect for retail ISDN	X																
13-SP	Resale ISDN Conversion	ISDN conversion as is for a resale customer	X																
14-SP	Retail ISDN Win Back	ISDN Win Back (as is) for a retail customer	X																

SECTION 2: RETAIL PARITY TESTING																				
												Directory Listings								
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
15-SP	Resale ISDN Conversion	ISDN conversion as specified for a resale customer	X																
16-SP	Retail ISDN Win Back	ISDN Win Back (as specified) for a retail customer	X																
17-SP	Resale ISDN Conversion	ISDN change order for a resale customer	X																
18-SP	Retail ISDN Change	ISDN change order for a retail customer	X																
19-SP	Resale ISDN Disconnect	ISDN disconnect order for a resale customer	X																
20-SP	Retail ISDN Disconnect	ISDN disconnect order for a retail customer	X																
Centrex																			
21-SP	Resale Centrex New	New customer - resale Centrex customer.				X													
22-SP	Retail Centrex New	New customer - retail Centrex customer				X													
23-SP	Resale Centrex Conversion	Existing customer -convert a customer to centrex reseller				X													
24-SP	Retail Centrex Win Back	Existing customer - win back a resale customer to Qwest				X													

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
25-SP	Resale Change	Existing customer - add a station line with a listing for the premise				X						X							
26-SP	Retail Change	Existing customer - add a station line with no listing to the premise				X													
27-SP	Resale Change (disconnect)	Existing customer - disconnect station line				X													
28-SP	Retail Change (disconnect	Existing customer - disconnect station line				X													
POTS PBX																			
29-SP	Resale PBX New Connect	New connect (change order) for resale POTS PBX small business customer				X													
30-SP	Retail PBX New Connect	New connect (change order) for retail POTS PBX small business customer				X													
31-SP	Resale PBX Conv	POTS PBX conversion as specified for a resale small business customer				X													
32-SP	Retail PBX Conv	POTS PBX Win Back for a retail small business customer				X													
33-SP	Change	Existing customer - add a feature				X					X								
34-SP	Change	Existing customer - disconnect line				X													

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
35-SP	Resale PBX Disconn.	POTS PBX disconnect for a resale small business customer				X													
36-SP	Retail PBX Disconn	POTS PBX disconnect for a retail small business customer				X													
Private Line																			
37-SP	Resale Repair Ticket	Create Design repair ticket for a small business customer				X													
38-SP	Retail Repair Ticket	Create Design repair ticket for a small business customer				X													
39-SP	Resale Repair Ticket	Retrieve design repair status for a small business customer				X													
40-SP	Retail Repair Ticket	Retrieve design repair status for a small business customer				X													
ISDN																			
41-SP	Resale Repair Ticket	Create Design repair ticket for a customer	X																
42-SP	Retail Repair Ticket	Create Design repair ticket for a customer	X																
43-SP	Resale Repair Ticket	Retrieve design repair status for a customer	X																

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
44-SP	Retail Repair Ticket	Retrieve design repair status for a customer	X																
Centrex																				
45-SP	Resale Repair Ticket	Create Design repair ticket for a customer				X													
46-SP	Retail Repair Ticket	Create Design repair ticket for a customer				X													
47-SP	Resale Repair Ticket	Retrieve design repair status for a customer				X													
48-SP	Retail Repair Ticket	Retrieve design repair status for a small business customer				X													
POTS PBX																				
49-SP	Resale Repair Ticket	Create Design repair ticket for a small business customer				X													
50-SP	Retail Repair Ticket	Create Design repair ticket for a small business customer				X													
51-SP	Resale Repair Ticket	Retrieve design repair status for a small business customer				X													
52-SP	Retail Repair Ticket	Retrieve design repair status for a small business customer				X													
ADSL Capable Unbundled Loop																				

SECTION 2: RETAIL PARITY TESTING																				
											Directory Listings									
Scenario #	Order Type	Scenario	Res SL	Res ML	Bus SL	Bus ML	Hunting	EAS	No Features	Single Feature	Multiple Features	Straight Line	Non-Published	Dual Name	Additional Listing	Non-listed	Caption	Directory Listing Explanation	Maintenance Issue
53-SP	UNE Trouble Ticket	Create Design repair ticket for a small business customer				X													
54-SP	UNE Trouble Ticket	Retrieve design repair status for a small business customer				X													

APPENDIX C – PERFORMANCE MEASURES

1. MEASURES USED IN FUNCTIONALITY AND CAPACITY TESTS

Measure Number	Description	Functionality Test		Capacity Test
		OSS Only	End-to-End	
PO-1	Pre-Order/Order Response Times	Yes	No	Yes
GA-1	Gateway Availability – IMA-GUI	Yes	No	No
GA-2	Gateway Availability – IMA-EDI	Yes	No	No
PO-5	FOC on Time	No	Yes	Yes
PO-6	Completion Notifications Transmitted within 24 hours (percent)	No	Yes	No
PO-7	Completion Notification Interval (average)	No	Yes	No
PO-3	LSR Rejection Notice Interval (average)	NO	YES	No
PO-4	LSRs Rejected (percent)	NO	YES	No
PO-2	Electronic Flow-through of LSRs	NO	YES	Yes
BI-1	Time to Provide Recorded Usage Records	NO	YES	No
BI-2	Invoices Delivered within 10 days	No	Yes	No
BI-3	Billing Accuracy – Adjustments for Errors	No	Yes	No
BI-4	Billing Completeness	No	Yes	No
OP-3	Installation Commitments Met (percent)	No	Yes	No
OP-4	Installation Interval (average)	No	Yes	No
OP-6	Delayed Days (average)	No	Yes	No
OP-5	New Service Installation Quality	No	Yes	No
MR-3	Out of Service Cleared within 24 hours	No	Yes	No
MR-4	All Troubles Cleared within 48 hours	No	Yes	No
MR-5	All Troubles Cleared within 4 hours – Designed Repair Process (percent)	No	Yes	No
MR-6	Mean Time to Restore (average)	No	Yes	No
MR-7	Repair Repeat Report Rate (percent)	No	Yes	No
MR-8	Trouble Rate (percent)	No	Yes	No
MR-9	Repair Appointments Met	No	Yes	No
MR-10	Customer and Non-Qwest related Trouble Reports (percent)	No	Yes	No
OP-7	Coordinated Cutover Interval – Unbundled Loop	No	Yes	No
OP-13	Coordinated Cuts On Time	No	Yes	No
PO-8	Jeopardy Notice Interval	No	Yes	No
PO-9	Timely Jeopardy Notices	No	Yes	No

2. MEASURES NOT USED IN FUNCTIONALITY AND CAPACITY TESTS

Gateway Availability

Measure Number	Description
GA-3	Gateway Availability - EB-TA
GA-4	Gateway Availability - EXACT

Ordering and Provisioning

Measure Number	Description
OP-2	Calls Answered within Twenty Seconds – Interconnect Provisioning Center (percent)
OP-8	Number Portability Timeliness

Maintenance & Repair

Measure Number	Description
MR-2	Calls Answered within 20 seconds – Interconnect Repair Center (percent)

Database Updates

Measure Number	Description
DB-1	Time to Update Databases
DB-2	Accurate Database Updates

Directory Assistance

Measure Number	Description
DA-1	Speed of Answer – Directory Assistance (average)
DA-2	Calls Answered Within Ten Seconds – Directory Assistance (percent)

Operator Services

Measure Number	Description
OS-1	Speed of Answer – Operator Services (average)
OS-2	Calls Answered Within Ten Seconds – Operator Services (percent)

Network Performance – Network Interconnection

Measure Number	Description
NI-1	Trunk Blocking
NP-1	NXX Code Activation

Collocation Provisioning

Measure Number	Description
CP-1	Installation Interval (average)
CP-2	Installation Commitments Met (percent)
CP-4	Feasibility Study Commitments Met (percent)
CP-6	Quote Commitments Met (percent)

APPENDIX D - PERFORMANCE MEASUREMENTS AND BENCHMARKS*

**Appendix D has been incorporated into Appendix B.*

APPENDIX E – Glossary/Terminology

ACRONYM/TERM	ACRONYM/TERM DESCRIPTION
ACC	Arizona Corporate Commission
ATIS	American Telecommunications Industry Solution
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
Conversion As-Is	A type of resale order that requires no changes to the customer's account
Conversion As-Specified	A type of resale order that requires one or more changes to the customer's account
CSR	Customer Service Record
DCI	Doherty and Company, Inc.
DOJ	Department of justice
EB-TA	Electronic Bonding-Trouble Administration
EEL	Enhanced Extended Loop
EDI	Electronic Data Interchange
EMI	Exchange Message Interface
FCC	Federal Communications Commission
FOC	Firm Order Confirmation
GUI	Graphical User Interface
IMA	Interconnect Mediated Access
LMOS	Loop Maintenance Operation System
LNP	Long Term Number Portability (also referred to as Local Number Portability)
LSR	Local Service Request
MLT	Mechanized Loop Test
OSS	Operations Support Systems
Partial Migrations	A type of resale order that transfer only part of the customer's account to a CLEC
PIC	Primary Interexchange Carrier
PMO	Present Method of Operation
Preordering/Ordering, Provisioning, Maintenance and Repair and Billing	FCC defined categories: Preordering/ordering = the exchange of information between LECs (local exchange carrier) about current or proposed customer products and services or unbundled network elements or some combination thereof Provisioning = the exchange of information between LECs where one executes a request for a set of products and services or unbundled network elements or combination thereof from the other with attendant acknowledgements and status reports Maintenance and repair = the exchange of information between LECs where one initiates a request for repair of existing products and services or unbundled network elements or combination thereof from the other with attendant acknowledgements and status reports Billing involves the provision of appropriate usage data by one LEC to another to facilitate customer billing with attendant acknowledgements and status reports
Pseudo-CLEC	A simulator that acts like an actual CLEC
SOC	Service Order Completions

ACRONYM/TERM	ACRONYM/TERM DESCRIPTION
SOP	Service Order Processor
Suspend and Restore	Types of orders that "cuts off" dial-tone (suspend) and reestablishes dial-tone for a customer
Test Transaction Generator	Hardware and software that generates transactions for the test
UDIT	Unbundled Digital Interoffice Trunk
UNE	Unbundled Network Element (UNEs are portions of an incumbent local exchange carrier's ubiquitous network)
UNE-P	Unbundled Network Element-Combination (UNE-P is a conversion of the customer's service to the CLEC at the unbundled network element rate)
UNE-Loop (UNE-L)	Unbundled Network Element-Loop (otherwise known as unbundled loop) (UNE-Loop includes the facilities between the end-user customer's network interface device and the meet point between the incumbent local exchange carrier's facilities and those of the CLEC)

OPENNESS REPORT

JANUARY 25, 2000

I. Introduction

In a December 22, 1999 letter to the Arizona Corporation Commission ("Commission") Staff[4], AT&T Communications of the Mountain States, Inc. ("AT&T"), TCG Phoenix ("TCG"), MCI WorldCom, Inc., on behalf of its regulated subsidiaries ("MCI"), Sprint Communications Company, L.P. ("Sprint") and Rhythms, Inc. ("Rhythms")(collectively the "CLECs") raised concerns regarding the openness of certain aspects of the Arizona Section 271 operational support systems ("OSS") testing process. The concerns expressed fell into three broad categories: (1) the openness of the meetings between the Commission's Third Party Test Administrator, Cap Gemini Ernst & Young Telecom, Media & Networks ("CGEY TMN") and U S WEST; (2) the openness of meetings and interactions between U S WEST and the Commission's Third Party Test Transaction Generator, Hewlett-Packard Company, Inc. ("HP"); and (3) the process for conducting TAG meetings.

In response, on December 29, 1999, Commission Staff sent all parties a Notice of a workshop to be held on January 13, 2000 to discuss the issues raised. Parties were also given until January 10, 2000 to file written comments on AT&T's December 22, 1999 letter. Parties were asked to address in their written comments the procedures used in other states and how the Commission could best utilize its web-site as a means to expeditiously disseminate 271 testing information to the parties. On January 10, 2000, the Commission received written comments from AT&T and TCG, MCI, and U S WEST. A workshop was held as planned on January 13, 2000, to more fully discuss the openness issues raised. Representatives from AT&T and TCG, MCI, Sprint, Rhythms and U S WEST attended the workshops. In addition, representatives from the Commission's Third Party Test Administrator, CGEY TMN, Third Party Test Transaction Generator, HP, and OSS Consultant, Doherty and Company, Inc. ("DCI") were present.

Through this report, the Commission Staff has attempted to address all of the CLECs' concerns and several concerns raised by U S WEST at the January 13, 2000 workshop. As more fully discussed herein, Commission Staff adopts virtually all of the CLECs' recommendations, which were in many instances supported by U S WEST. Staff has declined at this time to open meetings between CGEY TMN and the CLECs because of legitimate blindness concerns during this initial testing phase. However, the Commission Staff will make available to U S WEST redacted minutes of those meetings and as blindness becomes less of a concern, the Commission Staff will revisit this issue and eventually open these meetings as well.

The end result of the procedures implemented herein will be an open and rigorous OSS testing process which is certainly at least as open as many of the other states examined. Together the procedures adopted will establish openness of

[4] *Letter from Richard S. Wolters, Senior Attorney-AT&T on behalf of the CLECs to Staff Counsel.*

communications as the rule, rather than the exception. Commission Staff agrees that openness to the extent established herein is vital to the credibility of the Arizona Section 271 OSS test.

II. Discussion

A. Meetings Involving CGT

1. Meetings Between CGT and U S WEST

To-date, meetings between CGT and U S WEST have been held with representatives from the Commission Staff and/or DCI present. In addition, minutes of those meetings were taken which were then provided to the Commission Staff for review. The Commission Staff agreed to excerpt any confidential portions and disseminate the redacted version to both the CLECs and U S WEST.

The CLECs state that such a process is not open enough. They state that the Commission Staff's solution to keep minutes for distribution provides limited visibility to a closed set of meetings. The better solution, according to the CLECs, is to change the nature of the meetings to be fundamentally open meetings. AT&T Letter at p. 2.

Without a more open process, the CLECs are concerned that many issues will be discussed, debated and possibly resolved in private, outside of the formal TAG process. AT&T Letter at p. 2. The CLECs state that if they or U S WEST have concerns or issues involving any part of the test, the appropriate venue to discuss those issues or concerns is not behind closed doors in a private session with CGT but in a TAG meeting. Id. at p. 2. The CLECs state that discussion behind closed doors only hurts the process. Id. at p. 2. Finally, the CLECs argue that there is no reason for meetings between CGT and U S WEST to be private meetings. AT&T January 10, 2000 Comments. They point out that blindness is not an issue with U S WEST; that it is U S WEST's systems that are being tested; and that blindness concerns arise only with the CLEC – CGT meetings since in those meetings issues are being discussed with the CLECs that if known to U S WEST could compromise the integrity of the test.

U S WEST supports the establishment of listen lines for all regularly scheduled conference calls between CGT and U S WEST. U S WEST Comments at p. 3.

The Commission Staff notes that open meetings between the Third-Party Test Administrator and the Bell Operating Company ("BOC") are consistent with the processes used in other states. In New York, the regularly scheduled meetings between KPMG and Bell Atlantic were open for the CLECs to listen. U S WEST Comments at p. 3; MCI Comments at p. 5. In addition, in Pennsylvania, calls between KPMG and

Bell Atlantic were conducted both as 2-way calls where CLECs could interact by asking questions of clarity and as calls where CLECs could listen in and then later comment in open session with KPMG and Commission Staff. MCI Comments at pp. 5-6. Florida and Texas also held their meetings involving KPMG and test participants in the open with meeting minutes distributed by e-mail. AT&T Comments at pp.3-4; MCI Comments at p. 7.

Most parties also agree that Executive Sessions could be used if the need for confidentiality arises. See AT&T Comments at p. 7.

Given the unanimous agreement of all parties on this issue, Commission Staff shall require that all regularly scheduled meetings or calls between CGT and U S WEST be henceforth open to the CLECs through the establishment of a listen line. In addition, minutes will continue to be taken of these meetings. This change in procedure shall begin immediately with a listen line established for the next regularly scheduled Weekly Schedule Report ("WSR") conference call between CGT and U S WEST. The Commission Staff will e-mail TAG members the date and time of the call and the listen line number for the call. In addition, on a going forward basis, the WSR conference call and any other conference calls or meetings scheduled between U S WEST and CGT shall be noticed and a listen line established for the CLECs. The CLECs shall also be allowed to submit comment on these calls to the CGT Project Manager and all TAG team members within two (2) days of each call.

The only contacts between CGT and U S WEST that shall not be subject to this openness requirement will be unscheduled, incidental contacts. However, in all such cases CGT shall advise Staff if possible of any such contacts before they occur and Commission Staff and/or its Consultant DCI shall participate in and CGT shall take minutes of such calls. The CLECs shall subsequently be apprised of all calls or contacts and the purpose of them at the next regularly scheduled TAG meeting. The CLECs shall also be apprised of any conclusions reached in those calls or contacts. The rule, however, will be one of openness and Staff expects such incidental contacts to be kept to an absolute minimum, with virtually all issues involving U S WEST discussed in either the regularly scheduled call with U S WEST, or the TAG as appropriate. [5]

Commission Staff affirmatively states that it wants to avoid the problems encountered in other jurisdictions including Texas, where MCI indicates Telcordia met with SWBT many times without the CLECs' knowledge or documentation. In addition, the Commission Staff wants to avoid problems also encountered in Texas where SWBT was called upon by the Third Party Test Administrator to provide information and technical assistance which the CLECs were unaware of; were not apprised of the information provided; and had no input relating to it. See MCI Comments at p. 9.

[5] *For instance, MCI notes that in Pennsylvania, the PaPUC supported CLEC participation in calls addressing metrics, billing, use of GUI and defining some processes.*

The parties, however, must understand that some routine, incidental contacts are simply part of the testing process and it would not be feasible each time such a contact is made for Staff or any other party to be part of all such calls. However, in such cases, Staff believes CGT's reporting on such incidental contacts at each TAG meeting should suffice to ensure the degree of openness desired yet also ensure that test activities are not unnecessarily impeded.

Executive Sessions between CGT and U S WEST will be necessary to discuss such issues as the Company's assessment of competitive market transaction volumes regarding capacity tests and the programming and system design of U S WEST's performance measurements computer systems for data collection and processing. However, like the procedures used in Pennsylvania, the Commission Staff will attempt to manage the Executive Sessions between CGT and U S WEST that are necessary to protect U S WEST's confidential business matters. To the extent possible, all Executive Sessions shall be noticed with the topics to be addressed made available to the CLECs. The CLECs shall be kept generally informed of all topics discussed at all such Executive Sessions. Once again, the Commission Staff and/or its Consultant DCI shall take part in and CGT shall keep minutes of all such Sessions and to the extent they can without divulging proprietary data, report any conclusions of those Sessions at the next regularly scheduled TAG meeting.

Staff believes that implementing the openness procedures outlined above should continue to make what Staff believes has been a very open test from the start even more open and rigorous. Staff does not believe that the test has been compromised in any fashion up to this time since the test is still in its initial phases, the MTP has not yet been finalized and Staff and/or its Consultant, DCI, have been present on all calls between CGT and U S WEST to-date. Minutes have been taken of many of these calls, and these minutes will be made available, in redacted form, to all parties, as requested by MCI at the January 13, 2000 workshop.

2. Meetings Between CGT and the CLECs

All parties are not in agreement that meetings between CGT and the CLECs should be open. See, MCI January 10, 2000 Comments. While AT&T supports openness to some extent, it also states that "as the process is meant to be blind only to U S WEST, having CGT-CLEC meetings remain in their present form does not do anything to undercut the process." AT&T December 22, 1999 Letter to Staff Counsel at p. 3. U S WEST, on the other hand, states that all meetings between CGT and the CLECs should be open to U S WEST through a listen line. U S WEST Comments at p. 3. U S WEST states that if there is a need to discuss items beyond the hearing of one or more parties, the remaining parties can go into Executive Session at the end of the call. Id. at p. 3.

It is not apparent from the comments filed, that such meetings were open to the BOC in other states. Indeed, in some instances, particularly in the early testing stages as here, it appears that the meetings were closed. AT&T notes that in New York and Pennsylvania, there was provision made for meetings between CLECs and KPMG that excluded the Bell Atlantic company representatives. AT&T Comments at p. 8. AT&T states that the Staffs believed it appropriate that CLECs not be impeded from fully discussing concerns with test and live transaction processing and that KPMG would benefit from direct interaction with CLECS. The meetings were held weekly for New York testing, with one meeting per month held in person. AT&T Comments at p. 8. Meeting minutes were distributed to all interested parties, except Bell Atlantic. Id. at p. 9. AT&T also states that the need to maintain blindness to U S WEST throughout the process is critical to the credibility of the test. If U S WEST were able to recognize OSS transactions that emanate from the test as distinguished from live transactions from CLECs in production environments, U S WEST would be positioned to discriminately provide preferential processing of the test transactions.

Further, AT&T points out that testing in Texas, New York and Pennsylvania brought to light the need to establish blindness principles that hid information from the incumbent LEC that could have created the opportunity for preferential treatment of test orders. AT&T Comments at p. 10. Examples cited by AT&T included loop hot cuts in New York which AT&T states were coordinated between KPMG and participating CLECs so that observations could be made of Bell Atlantic's provisioning of the cut-over process without prior notice to Bell Atlantic. Id. The test results noted by KPMG were provided to the New York Commission Staff for review and verified against the experiences of other CLECs. Id.

The blindness concern extends to CLEC meetings in that CLECs must interact with CGT on matters involving coordination of CLEC facilities that are used in the course of the test, scheduling of personnel, test transaction generation and volume increases. AT&T Comments at pp. 9-10. Other reasons for closed meetings between CGT and the CLECs include the need to maintain blindness of test activities to U S WEST. In addition, many of the closed sessions between CGT and the CLECs will involve discussions concerning CLEC forecast information, CLEC resources to perform certain parts of the test, and other issues where matters that affect blindness will be discussed. See AT&T December 22, 1999 letter to Staff Counsel at p. 2.

Given all of the concerns relating to blindness at this stage of the testing process, Commission Staff believes the disadvantages of open CLEC – CGT meetings at this time far outweigh any advantages presented to Commission Staff. The same need for openness is not present in the case of the CGT-CLEC meetings as it is with the CGT – U S WEST meetings. Indeed, the need for closed CGT – CLEC meetings to ensure blindness is of paramount importance at this early stage of the testing process. Commission Staff will manage these meetings to ensure that any issues which arise, or

conclusions reached, that do not require blindness will be brought back to the TAG for an open discussion with U S WEST present. In addition, Commission Staff will ask CGT to take minutes of these meetings, which Staff will make available to U S WEST, in redacted format to ensure blindness. As blindness becomes less of a concern, Commission Staff will revisit this issue and will eventually open the meetings to U S WEST through the establishment of a listen line.

Finally, with regard to scheduled meetings or calls between CGT and the Pseudo-CLEC, Commission Staff has requested that minutes be kept of all such interactions. Commission Staff will distribute the minutes of such meetings, with any confidential portions redacted, to the CLECs for informational purposes. For obvious blindness reasons, the Commission Staff cannot include U S WEST in the distribution of those minutes at this time. However, Staff expects that the bulk of these contacts will occur during the testing process itself. During the testing process itself, incidents or exceptions that arise will be documented on the Master Issues Log and provided to U S WEST and all other parties.

B. Meetings Between HP and U S WEST

At the outset, Commission Staff notes that there is apparently a great deal of confusion and misunderstanding surrounding the rules of operation the Commission Staff has asked HP to follow. See AT&T December 22, 1999 Letter to Staff Counsel at p. 3. Commission Staff will attempt to address those concerns herein, but will first address the issue of whether meetings between HP and U S WEST should be open, and if so, to what extent.

The CLECs state that one of their primary concerns is that the interactions between U S WEST and HP will occur totally outside of their view. AT&T December 22, 1999 Letter to Staff Counsel at p. 3. They go on to state that it was their understanding that at the December 13 TAG meeting the Commission Staff attempted to mitigate the CLECs' concerns about HP's selection as the pseudo-CLEC by assuring the CLECs that U S WEST's interactions with HP would be open. Id. at p. 3. The CLECs give two primary reasons why the interactions between U S WEST and HP should be made public. First, an open process permits CLECs to evaluate whether the treatment and assistance that U S WEST provides HP as a pseudo-CLEC is superior to the treatment and assistance that U S WEST has provided to CLECs in general. Id. at p. 4. Otherwise, HP will have no reference point regarding the treatment and assistance that U S WEST typically provides to the CLECs. Id. The second reason is that U S WEST may offer HP a "better mouse trap", in which case that offer should be made public and available to the CLECs as well. Id.

U S WEST responds that this issue presents a conflict between blindness and openness but that if it is the consensus opinion of the CLECs, U S WEST will support

the decision to have the process open rather than blind. U S WEST Comments at p. 4. U S WEST further states that having the process open rather than blind is probably the most practical solution. Id. at p. 4.

The procedures used in other states support openness of contacts between HP and U S WEST. The CLECs note that in New York, all meetings between HP and Bell Atlantic were publicly noticed, a conference bridge was established for the meetings, and CLECs could listen in to the discussions. Meeting minutes were kept and were posted on a public Internet web page, and all documents exchanged between HP and Bell Atlantic were also posted on a public Internet web page. AT&T December 22, 1999 Letter to Staff Counsel at p. 4. AT&T also notes that all materials provided to HP by Bell Atlantic in regard to the HP role were identified and documented on the New York Commission's web site with links to Bell Atlantic's site that held the technical documents. Id. at p. 7. The CLECs endorse the New York process for purposes of the Arizona OSS test. Id. at p. 4.

Once again, given the consensus of all parties for openness of HP – U S WEST contacts, Commission Staff will require that henceforth all calls and meetings between HP and U S WEST be open to the CLECs through the establishment of a listen line, with the exception of incidental contacts.[6] This will extend to contacts involving both HP and U S WEST's account representative as well as any contacts relating to the establishment of HP's EDI interface. This process shall begin immediately. Executive Sessions may be utilized when the information exchanged is interface specific, i.e., IP addresses for ftp locations, passwords, SecurID modules, etc. However, the CLECs will be apprised of the topics of discussion at any closed sessions either through notice or at the next regularly scheduled TAG meeting.

Commission Staff believes that implementation of these procedures at this time will preserve the integrity of the Arizona test. Indeed, the Arizona test is still in its early stages. In New York, the listen line was first established for HP's initial contact with Bell Atlantic's account representative. While an account representative was recently assigned to HP in Arizona, Commission Staff has asked HP to delay contacting the U S WEST representative until openness procedures could be established and put into place. As in New York, HP's first contact with the U S WEST account representative will be the "watershed" event at which time a listen line will become the rule of practice rather than the exception to that rule. Notice will be given of the date and time of this call to all parties, via e-mail. On subsequent notices, the Staff and its consultants will attempt to provide notice both through e-mail and on the Commission's

[6] *The Commission's consultant has raised several administrative and legal issues regarding this procedure. The Commission intends to address these issues with the TAG members this week. Parties should realize that to address some of these concerns, implementation of this process may result in blindness giving way to openness to some degree.*

web-site. Staff and its consultants will not always be able to give the amount of notice desirable in all cases, and expects parties to be flexible in this regard.

The other issues of concern raised involved HP's obligation to keep minutes of its meetings with U S WEST and to make publicly available any documents or information exchanged between HP and U S WEST. AT&T Letter at p. 3. The Commission Staff wants to set the record straight in this regard that HP has been documenting all of its contacts with U S WEST, keeping Staff apprised of all such contacts on a continuing basis, taking minutes of those meetings and HP intends to make available to the CLECs any documents or information exchanged between it and the Company, as was the process in other states. Moreover, HP shall continue to take these steps in the future. In addition, HP shall be required to report at each TAG meeting any incidental contacts made and the subject of those contacts.

C. TAG MEETINGS

The third and final issue raised by the CLECs involved the processes used to conduct the current TAG meetings which the CLECs state are too restrictive, too short in duration and do not occur frequently enough. AT&T December 22, 1999 Letter to Staff Counsel, at p. 5. The CLECs go on to state that while nobody likes to have more meetings and longer meetings, in order to do justice to the evaluation of U S WEST's OSS and mitigate any delays to the overall testing schedule, as a rule, there should be two face-to-face TAG meetings every other week each lasting for at least two full days. Id. at p. 6. Further, the CLECs take issue with limiting input to one core representative per party and with forbidding the participation of outside persons via a conference bridge. Id. at p. 6. The CLECs state that for some issues, it may make sense for the parties to have subject matter experts other than core TAG members participating. They go on to state that the parties should be able to have subject matter experts participate in TAG meetings via conference call. Id. at p. 6.

U S WEST concurs that the restrictions placed on current TAG meetings need to be relaxed. U S WEST Comments at p. 5. U S WEST proposes that: 1) the rule that only the designated representative of a company can speak be eased and that for each issue a company should be allowed to designate a spokesperson, 2) discussion should not be cut off until all parties have had an opportunity to provide any and all input, 3) the meetings should be open to all interested parties, and 4) documents should be distributed to all persons attending TAG meetings, not just to one designated representative per company. Id. All in all, U S WEST suggests that the rules governing the TAG process be eased. Id. at p. 6.

Once again, given the unanimous opinion of all parties that the rules governing current TAG meetings be eased, Commission Staff and its consultants will make every attempt to accommodate the parties' desires in this regard. Henceforth, there will be

two regularly scheduled, face-to-face TAG meetings per month. Topics for discussion at the next TAG meeting will be discussed and TAG participants can decide at that time how long they believe the next meeting should last. CGT has never strictly enforced the designated TAG spokesman rule and has generally allowed input from anyone in attendance. This will continue so that input can be freely offered by those present at the TAG meetings. CGT will only enforce a designated spokesman rule if the process is abused. Parties will also be allowed to have subject matter experts participate in the future by conference bridge.

An issue was also raised by AT&T regarding the distribution of meeting minutes to core TAG members only. AT&T suggested that such limited distribution of meeting minutes presented problems when the core TAG members were on vacation or sick since they are responsible for disseminating the information to other participants within their respective organizations. To address this concern, CGT will begin e-mailing minutes and meeting notices to not only the designated core TAG member, but to the designated alternate as well.

Finally, absent more compelling reasons, the Commission Staff cannot agree to open the TAG process up to any interested persons, even though they are not parties to the Arizona proceeding.[7] Given that confidential information for Sedona project participants only is routinely distributed at TAG meetings, it would be difficult to ensure confidentiality if non-parties were present. However, Staff will allow persons other than parties to this proceeding to participate with the Commission Staff Project Manager's authorization.[8] But until the Commission Staff is offered a more compelling reason for completely opening these proceedings, and a workable solution to the dilemma regarding the distribution of confidential information is found, Commission Staff cannot agree to unrestricted, open TAG meetings. Reasonable restrictions on attendance by non-parties are necessary to preserve the integrity of the test.

D. Use of the Commission's Web-Site As a Repository Of Information on U S WEST's Section 271 Compliance

Commission Staff also requested parties to comment on how the Commission could best utilize its web-site for information dissemination to the parties and interested persons. Virtually all commenters favored the use by the Commission of its web-site to disseminate information to the parties in this case. Commission Staff agrees and will

[7] The TAG meetings are, of course, open to all parties of U S WEST's Section 271 proceeding, and all of these parties may also freely participate in any meetings.

[8] For example, the Commission Staff has given authorization to the Colorado Commission, other ROC state commissions, and the Department of Justice to freely attend any meetings held. The Commission Staff will have to, in such instances, institute a process for dealing with confidential information.

henceforth use its web-site as a repository for information relating to U S WEST Section 271 compliance, including OSS testing. Staff will examine the web-sites of the other state commissions to assist it in determining what information to make available. Such information is likely to include, inter alia, meeting notices and minutes, issues logs, technical documentation, operating procedures and interface documentation pertaining to U S WEST's systems. The Commission Staff is also considering the use of a privacy code where blindness or confidentiality concerns are present. The Commission Staff will discuss information availability and web-site use at an upcoming TAG meeting.

III. Other Issues

Several other issues were raised by U S WEST at the January 13, 2000 workshop to which the Commission Staff would like to take this opportunity to respond. First, U S WEST has expressed several times recently that it does not believe that it is receiving the information it needs concerning the testing process to ensure that the test is being conducted properly. It is true that the Commission Staff and its consultants, in an effort to preserve blindness and ensure test integrity, have withheld information regarding certain testing activities and the project schedule from U S WEST. Because one of our primary objectives, however, is also to ensure that this test is conducted properly, Commission Staff will allow U S WEST an opportunity to present information from other states relating to the type and amount of information disseminated to the BOC as part of the OSS testing process. U S WEST may also present reasons which would support its receipt of other information not routinely made available in other states for Staff's and its consultant's review and consideration.

So that this matter can be resolved expeditiously, U S WEST will have until Tuesday, February 1, 2000 to file comments with the Commission relating to this issue. All other parties may file reply comments on or before Friday, February 4, 2000. The Commission will consider the information presented and will to the extent possible allow U S WEST access to information to the same degree as that provided to the BOC in other states as part of the testing process, and to other information if the Company has made a persuasive showing to Staff that it should be entitled to the information. Additionally, the Company, like the CLECs, may also include comment on the topics typically included in any Executive Sessions in other states.

U S WEST also raised concerns regarding the process for escalating issues to the Commission Staff for resolution. The Commission Staff agrees with U S WEST that the Commission Staff and its Consultants, DCI, have an obligation to resolve such issues in an expeditious manner. It is the intent of the Commission Staff to do so. Accordingly, to address U S WEST's concerns in this regard, the Commission Staff has

requested that a formal escalation process be put in place immediately between CGT, the Staff and its Consultants, DCI.

U S WEST and the CLECs also expressed concern that HP's issues were not included in the Master Issues Log. To the extent they are not now included, HP's issues will be included in the Master Issues Log in the future.

Finally, as a further assurance to the parties and its consultants, the Commission Staff will itself become much more proactive in the future to anticipate issues, resolve concerns expeditiously and to move the process along.

IV. Conclusion

Commission Staff commends AT&T and the other CLECs for having brought their concerns forward in an open and timely fashion. Commission Staff also commends the CLECs for the spirit of cooperation they have shown and for their significant efforts to make Arizona's test as open and rigorous as possible. Staff does not believe, that in bringing their concerns forward, the CLECs were in anyway trying to delay the process. To the contrary, had they not brought their concerns forward, the parties' continued confidence in the Arizona testing process may have been diminished and the test may not have been as rigorous as the testing done in other states to-date which all parties, including U S WEST, want to ensure. We also commend U S WEST for agreeing to openness as the general rule, rather than the exception, in its contacts with CGT and HP. This also evidences a desire on the part of U S WEST to make this an open and rigorous process. Overall, Staff is very encouraged by the cooperation shown by all parties to-date and by the tremendous progress that has been made.

While the procedures implemented herein will not be easy and will oftentimes result in a more difficult and lengthy process overall, Commission Staff strongly believes that they are necessary to preserve the integrity of the Arizona OSS test and to assure the continued confidence of the parties in our testing process. The Commission Staff will have to revisit some of these issues, as well as others, along the way to ensure that the appropriate balance of fairness and openness is achieved. Additionally, to the extent the test is not progressing as Commission Staff believes appropriate, adjustments will have to be made. Commission Staff recognizes that this is an evolving process, which will need constant attention, oversight and adjustment. The Commission Staff and its consultants are fully committed to devoting whatever time and effort it takes to make this a successful testing endeavor from everyone's perspective. Overall, the Commission Staff and its consultants believe the procedures described herein appropriately balance the interests of all parties and will be of benefit to not only the CLECs, but to the Applicant U S WEST, once the results of the Arizona OSS test are submitted to the DOJ and FCC. However, to the extent any party is not satisfied

with the Staff's resolution of these issues, they may bring their concerns back to the Staff, or to the Hearing Division, which concerns will be resolved in a timely manner.